

FILE 'HCAPLUS' ENTERED AT 13:41:58 ON 29 OCT 2008

L4 15 S L3
L5 12049 S GANGLIOSIDE
L6 9736 S GD3 OR GM3
L7 330336 S INFLAMM?
L8 423224 S INFLAMM? OR ANTIINFLAMM? OR ARTHRITIS OR ALLERG?
L9 205148 S CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM?
L10 30478 S INFANT
L11 88 S L5 AND L6 AND L8
L12 11 S L5 AND L6 AND L8 AND L9
L13 5 S L12 AND (PY<2004 OR AY<2004 OR PRY<2004)
L14 5 S L5 AND L6 AND L8 AND L10
L15 5 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)
L16 185 S L5 AND L6 AND L9
L17 3 S L5 AND L6 AND L9 AND L10
L18 951 S GD3 AND GM3
L19 2 S L17 AND L18
L20 44 S L16 AND L18
L21 36 S L20 AND (PY<2003 OR AY<2003 OR PRY<2003)
L22 601 S BOVINE COLOSTRUM
L23 951 S GD3 AND GM3
L24 1 S L22 AND L23
L25 12049 S GANGLIOSIDE
L26 742386 S COMPOSITION
L27 0 S L22 AND L25 AND L26
L28 3 S L22 AND L25
L29 1520 S BUFFALO MILK
L30 2 S L23 AND L29
L31 0 S L29 AND L25 AND L26

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:36:25 ON 29 OCT 2008
FILE 'HCAPLUS' ENTERED AT 15:36:25 ON 29 OCT 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	84.44	263.93
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-12.00	-12.00

=> s ganglioside
L5 12049 GANGLIOSIDE

=> s GD3 or GM3
7774 GD3
2913 GM3
L6 9736 GD3 OR GM3

=> s inflamm?
L7 330336 INFLAMM?

=> s inflamm? or antiinflamm? or arthritis or allerg?
330336 INFLAMM?
58952 ANTIINFLAMM?
54622 ARTHRITIS
80910 ALLERG?
L8 423224 INFLAMM? OR ANTIINFLAMM? OR ARTHRITIS OR ALLERG?

=> s cholesterol or hypercholesterolem? or hyperlipidem?
191583 CHOLESTEROL
18775 HYPERCHOLESTEROLEM?
16870 HYPERLIPIDEM?
L9 205148 CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM?

=> s infant
L10 30478 INFANT

=> s 15 and 16 and 18
L11 88 L5 AND L6 AND L8

=> s 15 and 16 and 18 and 19
L12 11 L5 AND L6 AND L8 AND L9

=> s 112 and (PY<2004 or AY<2004 or PRY<2004)
24009892 PY<2004
4788668 AY<2004
4259753 PRY<2004
L13 5 L12 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s 15 and 16 and 18 and 110
L14 5 L5 AND L6 AND L8 AND L10

=> s 114 and (PY<2004 or AY<2004 or PRY<2004)
24009892 PY<2004
4788668 AY<2004
4259753 PRY<2004
L15 5 L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d 113 1-5 ti abs bib

L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Formulations for mediating inflammatory bowel disorders

AB The invention provides formulations and methods for mediating inflammation, in particular an inflammatory bowel disorder such as necrotizing enterocolitis. Further, the formulations are effective in lowering blood cholesterol and decreasing blood cholesterol absorption. The formulations comprise at least one ganglioside, which may be selected from the group consisting of: GD3, GM1, GM2, GM3, and GD1b. The invention provides a method of treating or preventing inflammatory diseases, such as necrotizing enterocolitis by delivery of at least one ganglioside to a subject in need thereof. Supplementation of foods or liqs. with gangliosides, for example infant formula or infant foods, can be employed according to the invention.

AN 2007:815148 HCAPLUS <<LOGINID::20081029>>

DN 147:197354

TI Formulations for mediating inflammatory bowel disorders

IN Clandinin, Michael Thomas; Park, Eek J.

PA Mti Meta Tech Inc., Can.

SO U.S. Pat. Appl. Publ., 39pp., Cont.-in-part of U.S. Ser. No. 551,789

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 20070173480	A1	20070726	US 2007-622858	20070112
	WO 2004087173	A2	20041014	WO 2004-CA375	20040312 <--
	WO 2004087173	A3	20041125		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 20060276430	A1	20061207	US 2004-551789	20040312 <--
PRAI	US 2004-551789	A2	20040312		
	WO 2004-CA375	W	20040312		
	US 2003-404095	A	20030402	<--	

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Methods and compositions using a glutathione donor with other agents for the prevention and treatment of inflammatory diseases or conditions

AB The invention discloses methods and compns. for treating or preventing inflammatory diseases or conditions in a patient, comprising administering to the patient a therapeutically effective amount of a composition comprising a glutathione donor, 5-amino 4-imidazolecarboxamide ribotide (AICAR), an HMG-CoA reductase inhibitor, D-threo-1-phenyl-2-decanoylamino-3-morpholino-1-propanol HCl (D-PDMP), and/or 1,5-(butylimino)-1,5-dideoxy-D-glucitol (Miglustat), or derivs. thereof.

AN 2005:612106 HCAPLUS <<LOGINID::20081029>>
 DN 143:109792
 TI Methods and compositions using a glutathione donor with other agents for the prevention and treatment of inflammatory diseases or conditions
 IN Singh, Inderjit
 PA Musc Foundation for Research Development, USA
 SO PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005063275	A1	20050714	WO 2004-US43432	20041223 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004308966	A1	20050714	AU 2004-308966	20041223 <--
	CA 2548313	A1	20050714	CA 2004-2548313	20041223 <--
	EP 1711197	A1	20061018	EP 2004-817053	20041223 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	CN 1897961	A	20070117	CN 2004-80038400	20041223 <--
	JP 2007516294	T	20070621	JP 2006-547406	20041223 <--
	US 20070270350	A1	20071122	US 2006-596198	20060602 <--
	MX 2006PA07378	A	20070126	MX 2006-PA7378	20060623 <--
	IN 2006DN04265	A	20070713	IN 2006-DN4265	20060724 <--
PRAI	US 2003-531828P	P	20031223	<--	
	US 2004-559112P	P	20040402		
	WO 2004-US43432	W	20041223		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Human tissue-specific housekeeping genes identified by expression profiling
 AB Housekeeping genes commonly expressed in 35 different human tissues, oligonucleotide probes and DNA microarrays containing them, are disclosed.
 AN 2004:355085 HCAPLUS <<LOGINID::20081029>>
 DN 140:369944
 TI Human tissue-specific housekeeping genes identified by expression profiling
 IN Aburatani, Hiroyuki; Yamamoto, Shogo
 PA NGK Insulators, Ltd., Japan
 SO PCT Int. Appl., 372 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004035785	A1	20040429	WO 2002-JP10753	20021016 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002344094 A1 20040504 AU 2002-344094 20021016 <--
 US 20040229233 A1 20041118 US 2003-684422 20031015 <--
 PRAI US 2002-418614P P 20021016 <--
 WO 2002-JP10753 A 20021016 <--

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Human antibodies derived from immunized xenomice
 AB Fully human antibodies against a specific antigen can be prepared by administering the antigen to a transgenic animal which has been modified to produce such antibodies in response to antigenic challenge, but whose endogenous loci have been disabled. Various subsequent manipulations can be performed to obtain either antibodies per se or analogs thereof. Antibodies or monoclonal antibodies to human interleukin 6, tumor necrosis factor α , CD4, L-selectin, gp39, tetanus toxin, PTH-related protein, and interleukin 8 were prepared in xenomice.
 AN 1997:2495 HCAPLUS <<LOGINID::20081029>>
 DN 126:30350
 OREF 126:6193a,6196a
 TI Human antibodies derived from immunized xenomice
 IN Kucherlapati, Raju; Jakobovits, Aya; Klapholz, Sue; Brenner, Daniel G.; Capon, Daniel J.
 PA Cell Genesys, Inc., USA
 SO PCT Int. Appl., 69 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9633735	A1	19961031	WO 1996-US5928	19960429 <--
	W: AU, CA, HU, JP, KR, NO, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6075181	A	20000613	US 1995-486857	19950607 <--
	CA 2219361	A1	19961031	CA 1996-2219361	19960429 <--
	AU 9656322	A	19961118	AU 1996-56322	19960429 <--
	EP 822830	A1	19980211	EP 1996-913247	19960429 <--
	EP 822830	B1	20080402		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 11505523	T	19990521	JP 1996-532779	19960429 <--
	EP 1709970	A1	20061011	EP 2005-28220	19960429 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 390933	T	20080415	AT 1996-913247	19960429 <--
	EP 1978033	A2	20081008	EP 2008-153778	19960429 <--
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	ES 2304786	T3	20081016	ES 1996-913247	19960429 <--
	US 6150584	A	20001121	US 1996-724752	19961002 <--

	US	20050054055	A1	20050310	US	2003-658521	20030908	<--
	US	20050241006	A1	20051027	US	2004-978290	20041029	<--
	US	20050287630	A1	20051229	US	2004-978297	20041029	<--
	JP	2005336200	A	20051208	JP	2005-195484	20050704	<--
	JP	2006115839	A	20060511	JP	2005-294297	20051007	<--
	AU	2006200868	A1	20060323	AU	2006-200868	20060301	<--
	AU	2006200868	B2	20080403				
	JP	2007167070	A	20070705	JP	2007-544	20070105	<--
	JP	2008253268	A	20081023	JP	2008-114842	20080425	<--
	AU	2008202860	A1	20080724	AU	2008-202860	20080630	
PRAI	US	1995-430938	A	19950427	<--			
	US	1990-466008	B2	19900112	<--			
	US	1990-610515	B2	19901108	<--			
	US	1992-919297	B2	19920724	<--			
	US	1993-31801	A2	19930315	<--			
	US	1993-112848	B2	19930827	<--			
	US	1994-234143	B2	19940428	<--			
	US	1994-234145	B2	19940428	<--			
	EP	1996-913247	A3	19960429	<--			
	JP	1996-532779	A3	19960429	<--			
	WO	1996-US5928	W	19960429	<--			
	US	1996-724752	A3	19961002	<--			
	US	1997-923138	A1	19970904	<--			
	US	2000-614092	A1	20000711	<--			
	AU	2003-227322	A3	20030730	<--			
	US	2003-656623	A1	20030904	<--			
	US	2003-658521	A1	20030908	<--			
	JP	2005-195484	A3	20050704				
	JP	2005-294297	A3	20051007				
	AU	2006-200868	A3	20060301				

L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Human antibodies derived from immunized xenomice

AB Antibodies with fully human variable regions against a specific antigen can be prepared by administering the antigen to a transgenic animal which has been modified to produce such antibodies in response to antigenic challenge, but whose endogenous loci have been disabled. Various subsequent manipulations can be performed to obtain either antibodies per se or analogs thereof.

AN 1996:756546 HCAPLUS <<LOGINID::20081029>>

DN 126:17804

OREF 126:3717a,3720a

TI Human antibodies derived from immunized xenomice

IN Kucherlapati, Raju; Jakobovits, Aya; Klapholz, Sue; Brenner, Daniel G.; Capon, Daniel J.

PA Cell Genesys, Inc., USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	-----	----	-----	-----	-----	
PI	WO 9634096	A1	19961031	WO 1995-US5500	19950428	<--
	W: AU, CA, FI, HU, JP, KR, NO, NZ					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	CA 2219486	A1	19961031	CA 1995-2219486	19950428	<--
	AU 9524668	A	19961118	AU 1995-24668	19950428	<--
	EP 823941	A1	19980218	EP 1995-918935	19950428	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE					
	JP 11505107	T	19990518	JP 1995-532463	19950428	<--

=> d 115 1-5 ti abs bib

L15 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Formulations for mediating inflammatory bowel disorders
 AB The invention provides formulations and methods for mediating inflammation, in particular an inflammatory bowel disorder such as necrotizing enterocolitis. Further, the formulations are effective in lowering blood cholesterol and decreasing blood cholesterol absorption. The formulations comprise at least one ganglioside, which may be selected from the group consisting of: GD3, GM1, GM2, GM3, and GD1b. The invention provides a method of treating or preventing inflammatory diseases, such as necrotizing enterocolitis by delivery of at least one ganglioside to a subject in need thereof. Supplementation of foods or liqs. with gangliosides, for example infant formula or infant foods, can be employed according to the invention.
 AN 2007:815148 HCAPLUS <<LOGINID::20081029>>
 DN 147:197354
 TI Formulations for mediating inflammatory bowel disorders
 IN Clandinin, Michael Thomas; Park, Eek J.
 PA Mti Meta Tech Inc., Can.
 SO U.S. Pat. Appl. Publ., 39pp., Cont.-in-part of U.S. Ser. No. 551,789
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070173480	A1	20070726	US 2007-622858	20070112
	WO 2004087173	A2	20041014	WO 2004-CA375	20040312 <--
	WO 2004087173	A3	20041125		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 20060276430	A1	20061207	US 2004-551789	20040312 <--
PRAI	US 2004-551789	A2	20040312		
	WO 2004-CA375	W	20040312		
	US 2003-404095	A	20030402	<--	

L15 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Isolation and identification of buffalo milk gangliosides and their use for humanization of infant and other formulas
 AB The present invention relates to gangliosides derived or isolated from buffalo milk, skimmed buffalo milk, buffalo milk serum or derivs. of either. Buffalo milk is reported to comprise gangliosides that are not contained in bovine milk, such as gangliosides that belong to the GM1-class. Furthermore, buffalo milk is found to comprise unknown gangliosides, denoted herein as ganglioside "F" and "L". Furthermore, the invention reports that gangliosides are surprisingly found in fractions of isolation procedures that were so far not considered

to comprise gangliosides. Finally, milk or milk serum from buffalo, for example as derived from mozzarella cheese production, contains specific gangliosides in the same amts. as human breast milk, which makes it suitable for humanization of infant and other formulas. Anti-inflammatory effects of buffalo milk gangliosides are also disclosed.

AN 2003:509876 HCAPLUS <<LOGINID::20081029>>

DN 139:68312

TI Isolation and identification of buffalo milk gangliosides and their use for humanization of infant and other formulas

IN Colarow, Ladislav; Turini, Marco; Berger, Alvin

PA Societe des Produits Nestle S.A., Switz.

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1323424	A1	20030702	EP 2001-130614	20011227 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO	2003055497	A1	20030710	WO 2002-EP14876	20021220 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2002361244	A1	20030715	AU 2002-361244	20021220 <--
AU	2002361244	B2	20080807		
EP	1461048	A1	20040929	EP 2002-796763	20021220 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
NZ	534132	A	20061222	NZ 2002-534132	20021220 <--
US	20050107311	A1	20050519	US 2004-498946	20040615 <--
PRAI	EP 2001-130614	A	20011227	<--	
	WO 2002-EP14876	W	20021220	<--	

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Variation of the ganglioside compositions of human milk, cow's milk and infant formulas

AB The ganglioside compns. of human milk, cow's milk and infant formulas were compared. The results showed that there was a drastic change in the ganglioside composition from the colostrum to later human milk, and that both the patterns and contents of gangliosides in human milk, cow's milk and infant formulas differed markedly. In human milk, the total lipid-bound sialic acid level was two times higher than those in cow's milk and infant formulas. The major ganglioside in the later human milk, GM3 (27.7%), was only a minor component in the colostrum, cow's milk and infant formulas (3.3, 2.8 and 0.4-2.6%, resp.). GD3 represented 49.0, 61.0 and 72.4-86.6%, resp., of the colostrum, cow's milk and infant formulas, compared to 31.8% of the later human milk gangliosides. Another four gangliosides, which were assumed to be

c-series gangliosides, were detected in the colostrum and the later human milk. They represented 33-38% of total lipid-bound sialic acid, and were tentatively designated as GX1, GX2, GX3 and GX4, resp. However, only GX1 and GX2 were observed in cow's milk and infant formulas. The variation of the gangliosides in human and cow's milk, and infant formulas might have some biol. significance regarding neonatal brain development, allergies, infant growth and non-Ig prophylactic activities against some bacterial toxins.

AN 2000:8006 HCAPLUS <<LOGINID::20081029>>
 DN 133:16574
 TI Variation of the ganglioside compositions of human milk, cow's milk and infant formulas
 AU Pan, X. L.; Izumi, T.
 CS Department of Pediatrics, Oita Medical University School of Medicine, Oita, Japan
 SO Early Human Development (2000), 57(1), 25-31
 CODEN: EHDEDN; ISSN: 0378-3782
 PB Elsevier Science Ireland Ltd.
 DT Journal
 LA English
 RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Antiallergy agents containing gangliosides
 AB Antiallergy agents containing gangliosides as active ingredients are claimed. The agents are especially useful for application to infants by the forms of oral prepns. or nutrient compns. Feeding of infantile rats with artificial milk containing ganglioside GM3 (I) significantly inhibited permeation of β -lactoglobulins through gastric mucosa resulting in reduction of IgE formation. I was prepared from buttermilk powder by treatment with Bacillus protease followed by ultrafiltration. Powdered milk, coffee-flavored milk and soft capsules containing I were also prepared

AN 1996:434876 HCAPLUS <<LOGINID::20081029>>
 DN 125:76379
 OREF 125:14303a,14306a
 TI Antiallergy agents containing gangliosides
 IN Kawakami, Hiroshi; Idota, Tadashi
 PA Snow Brand Milk Prod Co Ltd, Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 08109133	A	19960430	JP 1994-271775	19941011 <--
	JP 4034364	B2	20080116		
PRAI	JP 1994-271775		19941011	<--	

L15 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Anti-allergic infant formula containing gangliosides
 AB Infant formulas which include N-acetylneuraminic acid-containing gangliosides provide protection against allergies in premature, nursing, and weaned infants as well as newborn animals. Preferred gangliosides are GM3, GD3, and GT1b at concns. of 0.1-70 mg/L.
 AN 1996:202890 HCAPLUS <<LOGINID::20081029>>
 DN 124:242351
 OREF 124:44689a,44692a

TI Anti-allergic infant formula containing gangliosides
 IN Schrotten, Horst
 PA Milupa Ag, Germany
 SO Ger. Offen., 3 pp.
 CODEN: GWXXBX
 DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4430041	A1	19960229	DE 1994-4430041	19940824 <--
	WO 9605844	A1	19960229	WO 1995-EP3346	19950823 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 777486	A1	19970611	EP 1995-931192	19950823 <--
	EP 777486	B1	20030416		
	EP 777486	B2	20070613		
	R: DE, FR, GB, IT				
PRAI	DE 1994-4430041	A	19940824	<--	
	WO 1995-EP3346	W	19950823	<--	

=> d his

(FILE 'HOME' ENTERED AT 13:40:17 ON 29 OCT 2008)

FILE 'REGISTRY' ENTERED AT 13:40:28 ON 29 OCT 2008

L1 STRUCTURE UPLOADED

L2 4 S L1

L3 45 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 13:41:58 ON 29 OCT 2008

L4 15 S L3

L5 12049 S GANGLIOSIDE

L6 9736 S GD3 OR GM3

L7 330336 S INFLAMM?

L8 423224 S INFLAMM? OR ANTIINFLAMM? OR ARTHRITIS OR ALLERG?

L9 205148 S CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM?

L10 30478 S INFANT

L11 88 S L5 AND L6 AND L8

L12 11 S L5 AND L6 AND L8 AND L9

L13 5 S L12 AND (PY<2004 OR AY<2004 OR PRY<2004)

L14 5 S L5 AND L6 AND L8 AND L10

L15 5 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

126.99

306.48

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-20.00

-20.00

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:39:15 ON 29 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 15:46:01 ON 29 OCT 2008
FILE 'HCAPLUS' ENTERED AT 15:46:01 ON 29 OCT 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	126.99	306.48
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-20.00	-20.00

=> s 15 and 16 and 19
L16 185 L5 AND L6 AND L9

=> s 15 and 16 and 19 and 110
L17 3 L5 AND L6 AND L9 AND L10

=> d 117 1-3 ti abs bib

L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Formulations for mediating inflammatory bowel disorders
AB The invention provides formulations and methods for mediating inflammation, in particular an inflammatory bowel disorder such as necrotizing enterocolitis. Further, the formulations are effective in lowering blood cholesterol and decreasing blood cholesterol absorption. The formulations comprise at least one ganglioside, which may be selected from the group consisting of: GD3, GM1, GM2, GM3, and GD1b. The invention provides a method of treating or preventing inflammatory diseases, such as necrotizing enterocolitis by delivery of at least one ganglioside to a subject in need thereof. Supplementation of foods or liqs. with gangliosides, for example infant formula or infant foods, can be employed according to the invention.
AN 2007:815148 HCAPLUS <<LOGINID::20081029>>
DN 147:197354
TI Formulations for mediating inflammatory bowel disorders
IN Clandinin, Michael Thomas; Park, Eek J.
PA Mti Meta Tech Inc., Can.
SO U.S. Pat. Appl. Publ., 39pp., Cont.-in-part of U.S. Ser. No. 551,789
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 20070173480	A1	20070726	US 2007-622858	20070112
	WO 2004087173	A2	20041014	WO 2004-CA375	20040312
	WO 2004087173	A3	20041125		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
 TD, TG

US 20060276430 A1 20061207 US 2004-551789 20040312
 PRAI US 2004-551789 A2 20040312
 WO 2004-CA375 W 20040312
 US 2003-404095 A 20030402

L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Diet-induced changes in membrane gangliosides in rat intestinal mucosa, plasma and brain

AB The effects of dietary gangliosides on ganglioside contents in the small intestinal mucosa, blood plasma, and brain were studied in male 18-day-old Sprague-Dawley rats. The localization of GM3 and GD3 gangliosides in the enterocyte membrane was examined. The rats were fed semipurified diet containing 20% fat. The control diet contained triglycerides reflecting the fat formulation in infant formulas. Two exptl. diets were formulated by adding sphingomyelin (1% of total fat) or ganglioside-enriched lipid (0.1% of total fat) to the control diet fat. The ganglioside fraction of the ganglioside-enriched lipid diet contained >80% GD3. After 2 wk of feeding, the total and individual ganglioside and cholesterol contents were measured in small intestinal mucosa, blood plasma, and brain. The ganglioside-enriched lipid diet significantly increased total gangliosides in the intestinal mucosa, plasma and brain compared with the control diet. The ganglioside-enriched lipid diet increased the levels of GD3 (7.5%) in the intestine vs. controls (3.2%), while decreasing the levels of GM3 (major intestinal ganglioside). The cholesterol/ganglioside ratio in the intestinal mucosa, plasma, and brain decreased in rats fed the ganglioside-enriched lipid vs. control diet. Confocal microscopy showed that GM3 was localized exclusively in the apical membrane of the enterocyte, whereas GD3 was primarily localized in the basolateral membrane. Thus, dietary gangliosides are absorbed in the small intestine and transported to different membrane sites. They alter ganglioside levels in the intestinal mucosa, blood plasma, and brain and may change the functions of developing enterocytes (possibly of other cell lines also).

AN 2005:272173 HCAPLUS <<LOGINID::20081029>>

DN 143:152534

TI Diet-induced changes in membrane gangliosides in rat intestinal mucosa, plasma and brain

AU Park, Eek Joong; Suh, Miyoung; Ramanujam, Kal; Steiner, Kurt; Begg, David; Clandinin, M. Thomas

CS Nutrition and Metabolism Research Group, Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Can.

SO Journal of Pediatric Gastroenterology and Nutrition (2005), 40(4), 487-495
 CODEN: JPGND6; ISSN: 0277-2116

PB Lippincott Williams & Wilkins

DT Journal

LA English

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Lipid changes in Niemann-Pick disease type C brain: personal experience and review of the literature

AB Niemann-Pick disease type C (NPC) is a neurovisceral disorder characterized by lysosomal sequestration of endocytosed LDL-cholesterol, premature and abnormal enrichment of cholesterol in trans Golgi cisternae and accompanying anomalies in intracellular sterol trafficking. In addition to cholesterol, the NPC lesion has also been shown to impact the metabolism of sphingolipids. Lipids, more particularly glycolipids, were studied in brain tissue from eight cases with proven NPC, ranging from 21 fetal weeks to 19 yr of age (one case with rapidly fatal neonatal cholestatic icterus, three cases with infantile neurol. onset, one late infantile and two juvenile neurol. cases). In gray matter, the concns. of total cholesterol, sphingomyelin and total gangliosides were within the normal range in all cases. In white matter, a severe loss of galactosylceramide and other myelin lipids (including cholesterol) was prominent in patients with the neurol. severe infantile form (levels similar to those in 6-8 mo-old infants) or the late infantile form of the disease, but only a slight decrease was observed in patients with a juvenile neurol. onset. Anal. of the ganglioside profiles and study of minor neutral glycolipids revealed striking abnormalities, although not present at the fetal stage. In cerebral cortex, gangliosides GM3 and GM2 showed a significant increase, 10-15 fold and 3-5-fold the normal level, resp., with already some abnormalities in a 3-mo-old patient. Except in the latter patient, a prominent storage of glucosylceramide, lactosylceramide and gangliotriaosylceramide (asialo-GM2) was observed, with 10-50-fold increases from the normal concentration. The fatty acid composition

of

these glycolipids suggests that they have a neuronal origin. A slight increase of globotriaosyl- and globotetraosyl-ceramide and of more complex neutral glycolipids also occurred. While ganglioside changes were essentially similar in gray and white matter, changes of the neutral glycolipids were only minimal in the latter. Our data are in good accordance with previous studies and provide addnl. information. They emphasize that, apart a varying demyelinating process (most pronounced in children with a severe infantile neurol. form) brain lipids abnormalities are essentially located to the gray matter. They confirm and give more precise information on the glycolipid nature of the neuronal storage, and established that a similar type of changes occurs in the different neurol. forms of the disease. Yet, our study indicates that glycolipid changes in brain do not occur before a few months after birth, possibly at a period concomitant with the onset of neurol. symptoms, in contrast to the very early glycolipid abnormalities observed in non-neural organs. Glycolipid changes rather similar to those seen in NPC brain, in particular for gangliosides, have been described for other lysosomal disorders such as Niemann-Pick type A and mucopolysaccharidoses. The glucosyl- and lactosylceramide accumulation, however, is more striking in NPC, especially taking into account that there is no other known storage in NPC brain. Some neuropathol. changes, such as ectopic neurites, could be related to the glycolipid changes. Metabolic studies in cultured fibroblasts combined to the observation that no lipids other than glycolipids accumulate in brain suggest that the NPC gene products possibly participate in intracellular transport or regulate metabolism of glycolipids.

AN 1999:256074 HCAPLUS <<LOGINID::20081029>>

DN 131:57391

TI Lipid changes in Niemann-Pick disease type C brain: personal experience and review of the literature

AU Vanier, Marie T.

CS INSERM Unit 189, Department of Biochemistry, Lyon-Sud School of Medicine, Oullins, 69921, Fr.

SO Neurochemical Research (1999), 24(4), 481-489
CODEN: NEREDZ; ISSN: 0364-3190

PB Plenum Publishing Corp.

DT Journal
LA English
RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s gd3 and gm3
7774 GD3
2913 GM3
L18 951 GD3 AND GM3

=> s 117 and 118
L19 2 L17 AND L18

=> d 119 1-2 ti abs bib

L19 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Formulations for mediating inflammatory bowel disorders
AB The invention provides formulations and methods for mediating inflammation, in particular an inflammatory bowel disorder such as necrotizing enterocolitis. Further, the formulations are effective in lowering blood cholesterol and decreasing blood cholesterol absorption. The formulations comprise at least one ganglioside, which may be selected from the group consisting of: GD3, GM1, GM2, GM3, and GD1b. The invention provides a method of treating or preventing inflammatory diseases, such as necrotizing enterocolitis by delivery of at least one ganglioside to a subject in need thereof. Supplementation of foods or liqs. with gangliosides, for example infant formula or infant foods, can be employed according to the invention.
AN 2007:815148 HCAPLUS <<LOGINID::20081029>>
DN 147:197354
TI Formulations for mediating inflammatory bowel disorders
IN Clandinin, Michael Thomas; Park, Eek J.
PA Mti Meta Tech Inc., Can.
SO U.S. Pat. Appl. Publ., 39pp., Cont.-in-part of U.S. Ser. No. 551,789
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070173480	A1	20070726	US 2007-622858	20070112
	WO 2004087173	A2	20041014	WO 2004-CA375	20040312
	WO 2004087173	A3	20041125		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 20060276430	A1	20061207	US 2004-551789	20040312
PRAI	US 2004-551789	A2	20040312		
	WO 2004-CA375	W	20040312		
	US 2003-404095	A	20030402		

L19 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Diet-induced changes in membrane gangliosides in rat intestinal mucosa, plasma and brain
 AB The effects of dietary gangliosides on ganglioside contents in the small intestinal mucosa, blood plasma, and brain were studied in male 18-day-old Sprague-Dawley rats. The localization of GM3 and GD3 gangliosides in the enterocyte membrane was examined. The rats were fed semipurified diet containing 20% fat. The control diet contained triglycerides reflecting the fat formulation in infant formulas. Two exptl. diets were formulated by adding sphingomyelin (1% of total fat) or ganglioside-enriched lipid (0.1% of total fat) to the control diet fat. The ganglioside fraction of the ganglioside-enriched lipid diet contained >80% GD3. After 2 wk of feeding, the total and individual ganglioside and cholesterol contents were measured in small intestinal mucosa, blood plasma, and brain. The ganglioside-enriched lipid diet significantly increased total gangliosides in the intestinal mucosa, plasma and brain compared with the control diet. The ganglioside-enriched lipid diet increased the levels of GD3 (7.5%) in the intestine vs. controls (3.2%), while decreasing the levels of GM3 (major intestinal ganglioside). The cholesterol/ganglioside ratio in the intestinal mucosa, plasma, and brain decreased in rats fed the ganglioside-enriched lipid vs. control diet. Confocal microscopy showed that GM3 was localized exclusively in the apical membrane of the enterocyte, whereas GD3 was primarily localized in the basolateral membrane. Thus, dietary gangliosides are absorbed in the small intestine and transported to different membrane sites. They alter ganglioside levels in the intestinal mucosa, blood plasma, and brain and may change the functions of developing enterocytes (possibly of other cell lines also).
 AN 2005:272173 HCAPLUS <<LOGINID::20081029>>
 DN 143:152534
 TI Diet-induced changes in membrane gangliosides in rat intestinal mucosa, plasma and brain
 AU Park, Eek Joong; Suh, Miyoung; Ramanujam, Kal; Steiner, Kurt; Begg, David; Clandinin, M. Thomas
 CS Nutrition and Metabolism Research Group, Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Can.
 SO Journal of Pediatric Gastroenterology and Nutrition (2005), 40(4), 487-495
 CODEN: JPGND6; ISSN: 0277-2116
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 116 and 118
 L20 44 L16 AND L18
 => s 120 and (PY<2003 or AY<2003 or PRY<2003)
 22959107 PY<2003
 4499192 AY<2003
 3967411 PRY<2003
 L21 36 L20 AND (PY<2003 OR AY<2003 OR PRY<2003)
 => d 121 1-36 ti abs bib

L21 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Effect of Gangliosides on the Distribution of a Glycosylphosphatidylinositol-anchored Protein in Plasma Membrane from

Chinese Hamster Ovary-K1 Cells

AB Glycosylphosphatidylinositol (GPI)-anchored proteins are clustered mainly in sphingolipid-cholesterol microdomains of the plasma membrane. The distribution of GPI-anchored fusion yellow fluorescent protein (GPI-YFP) in the plasma membrane of Chinese hamster ovary (CHO)-K1 cells with different glycolipid compns. was investigated. Cells depleted of glycosphingolipids by inhibiting glucosylceramide synthase activity or cell lines expressing different gangliosides caused by stable transfection of appropriate ganglioside glycosyltransferases or exposed to exogenous GM1 were transfected with GPI-YFP cDNA. The distribution of GPI-YFP fusion protein expressed at the plasma membrane was studied using the membrane-impermeable crosslinking agent bis(sulfosuccinimidyl)suberate. Results indicate that GPI-YFP forms clusters at the surface of cells expressing GM3, or cells depleted of glycolipids, or transfected cells expressing mainly GD3 and GT3, or GM1 and GD1a, or mostly GM2, or highly expressing GM1. However, no significant changes in membrane microdomains of GPI-YFP were detected in the different glycolipid environments provided by the membranes of the cell lines under study. On the other hand, wild type CHO-K1 cells exposed to 100 μ m GM1 before crosslinking with bis(sulfosuccinimidyl)suberate showed a dramatic reduction in the amount of GPI-YFP clusters. These findings clearly indicate that manipulating the glycolipid content of the cellular membrane, just by changing the ganglioside biosynthetic activity of the cell, did not significantly affect the association of GPI-YFP on the cell surface of CHO-K1 cells. The effect of exogenous GM1 gangliosides on GPI-YFP plasma membrane distribution might be a consequence of the ganglioside level reached in plasma membrane and/or the effect of particular ganglioside species (micelles) that lead to membrane architecture and/or dynamic modifications.

AN 2002:879482 HCAPLUS <<LOGINID::20081029>>

DN 138:300933

TI Effect of Gangliosides on the Distribution of a Glycosylphosphatidylinositol-anchored Protein in Plasma Membrane from Chinese Hamster Ovary-K1 Cells

AU Crespo, Pilar Maria; Zurita, Adolfo Ramon; Daniotti, Jose Luis

CS Departamento de Quimica Biologica, Universidad Nacional de Cordoba, Facultad de Ciencias Quimicas, Centro de Investigaciones en Quimica Biologica de Cordoba, Cordoba, 5000, Argent.

SO Journal of Biological Chemistry (2002), 277(47), 44731-44739
CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Human Plasma trans-Sialidase Donor and Acceptor Specificity

AB Earlier we have isolated from human plasma desialylated low d. lipoproteins (dLDL) and showed that dLDL induce cholesterol esters accumulation - the main process accompanying atherosclerosis development. Second, the process of lipoprotein desialylation took place in plasma, and, finally, sialic acids removed from LDL are transferred to other serum glycoconjugates. In this study we isolated by affinity chromatog. an enzyme from human plasma which transfers sialic acid residues (trans-sialidase) and studied its donor and acceptor specificity. Isolated enzyme can remove sialic acids from different lipoproteins, glycoproteins (fetuin, transferrin), and gangliosides (GM3, GD3, GM1, GD1a, GD1b) in the presence of saccharide acceptor. Plasma enzyme translocates α 2-6, α 2-3 and to a lower extent

α 2-8 bonded sialic acids. Sialoglycoconjugates of human serum erythrocytes, serum lipoproteins, glycoproteins, and gangliosides can serve as donors of sialic acid for trans-sialidase. Desialylated lipoproteins, especially dLDL, are more preferable sialic acid acceptors. Transferred sialic acid is found to be α 2-6, α 2-3, and α 2-8 connected.

AN 2002:663823 HCAPLUS <<LOGINID::20081029>>

DN 138:102706

TI Human Plasma trans-Sialidase Donor and Acceptor Specificity

AU Tertov, V. V.; Nikonova, E. Yu.; Nifant'ev, N. E.; Bovin, N. V.; Orekhov, A. N.

CS Cardiology Research Center, Institute of Experimental Cardiology, Russian Academy of Medical Sciences, Moscow, 121552, Russia

SO Biochemistry (Moscow, Russian Federation) (Translation of Biokhimiya (Moscow, Russian Federation)) (2002), 67(8), 908-913

CODEN: BIORAK; ISSN: 0006-2979

PB MAIK Nauka/Interperiodica Publishing

DT Journal

LA English

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Neurons in Niemann-Pick disease type C accumulate gangliosides as well as unesterified cholesterol and undergo dendritic and axonal alterations

AB Niemann-Pick disease type C (NPC) is a lethal neurol. storage disorder of children most often caused by a defect in the protein NPC1. To better understand the disease the authors thoroughly characterized the cellular and morphol. alterations occurring in murine, feline, and human NPC. Using immunocytochem. and filipin histochem. the authors show that both gangliosides and unesterified cholesterol are differentially stored in neurons of the cerebral cortex, cerebellum, and hippocampus, as well as in liver. Double fluorescence labeling revealed that GM2 ganglioside and unesterified cholesterol were partially co-localized in vesicular structures, and triple fluorescence labeling utilizing a LAMP-1 antibody identified many of these organelles as part of the late endosomal/lysosomal pathway. These observations, coupled with the proposed role of NPC1 in intracellular cholesterol movement, suggest that GM3 and GM2 gangliosides as well as unesterified cholesterol may be retrogradely cleared from late endosomes/lysosomes by an NPC1-dependent mechanism. Cellular consequences of the NPC metabolic defect as shown by parvalbumin immunocytochem. and rapid Golgi staining, resp., revealed characteristic axonal spheroids on GABAergic neurons and ectopic dendritogenesis that followed a species-specific gradient of: mouse < feline < human. These studies suggest that the homeostatic regulation of gangliosides and cholesterol in neurons is mediated by NPC1 and that perturbations in this mechanism cause a complex neuronal storage disorder.

AN 2001:90659 HCAPLUS <<LOGINID::20081029>>

DN 135:32333

TI Neurons in Niemann-Pick disease type C accumulate gangliosides as well as unesterified cholesterol and undergo dendritic and axonal alterations

AU Zervas, Mark; Dobrenis, Kostantin; Walkley, Steven U.

CS Department of Neuroscience, Albert Einstein College of Medicine, Bronx, NY, 10461, USA

SO Journal of Neuropathology and Experimental Neurology (2001), 60(1), 49-69

CODEN: JNENAD; ISSN: 0022-3069

PB American Association of Neuropathologists, Inc.

DT Journal
LA English

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Successive isolation and separation of the major lipid fractions including gangliosides from single biological samples

AB Currently available techniques concerning extraction and characterization of the different lipids from biol. specimens are designed for particular families and do not address consecutive isolation of lipid constituents in their globality. We describe here a simple, nondestructive chromatog. procedure that allows efficient elution and further anal. of the major lipid classes (neutral lipids, phospholipids, nonsialylated sphingolipids, and gangliosides) in their natural states from the same starting material. The procedure describes the use of solvent mixts. adapted to silicic acid column chromatog. and permits 90-97% recovery of each of the above lipid groups. We have particularly concentrated on optimizing the efficient recovery of the diverse minor forms of gangliosides, free of other contaminants, from relatively small amts. of neural tissue. As model systems we have used in vivo and in vitro preps. of mammalian retina for which only fragmentary data are available on lipid composition. We show that relative to brain, retina contains, for example, twofold more sphingomyelin and sixfold more GD3 ganglioside. In turn, cultured retinal glial cells contain twofold higher levels of globoside and eightfold higher amts. of GM3 ganglioside with respect to intact retina. Compared to previously published techniques, we obtain improved total ganglioside recovery, with enrichment of poly-sialogangliosides. The technique presented here should be widely applicable to analyze global lipid composition of diverse biol. samples.

AN 1997:389494 HCAPLUS <<LOGINID::20081029>>

DN 127:119144

OREF 127:22913a,22916a

TI Successive isolation and separation of the major lipid fractions including gangliosides from single biological samples

AU Dreyfus, Henri; Guerold, Bernard; Freysz, Louis; Hicks, David

CS Laboratoire de Physiopathologie Retinienne, INSERM CJF 92-02, Clinique Medicale A, Strasbourg, 67091, Fr.

SO Analytical Biochemistry (1997), 249(1), 67-78
CODEN: ANBCA2; ISSN: 0003-2697

PB Academic

DT Journal

LA English

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Retinoic acid induces changes in Xenopus embryo glycolipid pattern

AB Retinoic acid (RA), known for its important role in cellular differentiation, may cause a modification of glycolipid distribution characterized by a shift from globoserie towards latto- and ganglio-series. In the present paper, the authors have investigated the modifications of the lipidic pattern after exogenous RA treatment of Xenopus embryos. The authors have noticed a decrease in neutral glycolipids with a parallel increase in gangliosides; the content of sulfatides does not seem to be modified. Beside the shift toward ganglio-series, the authors have also observed a redistribution inside this class of lipids. In particular, following RA treatment, the relative distribution of GD1b and GT1b increases while that of GM3 decreases.

AN 1996:160632 HCAPLUS <<LOGINID::20081029>>

DN 124:223401
OREF 124:41205a,41208a
TI Retinoic acid induces changes in Xenopus embryo glycolipid pattern
AU Rizzo, Angela M.; Gornati, Rosalba; Rossi, Federica; Bernardini, Giovanni; Berra, Bruno
CS Istituto di Fisiologia Generale e Chimica Biologica, Universita di Milano, Milan, I-20134, Italy
SO Cell Biology International (1995), 19(11), 895-901
CODEN: CBIIEV; ISSN: 1065-6995
PB Academic
DT Journal
LA English

L21 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Characterization of GD3 synthetase from rat liver cancer
AB The characterization of GD3 synthetase showed that its optimum pH was 6.25 and its apparent Km values for CMP-sialic acid and GM3 were 18.8 and 10.5 μ M, resp. The enzyme was stimulated by Mn²⁺, Mg²⁺, cholesterol, cardiolipin, sphingomyelin, L-PC, DL-PE, L-PS, and L-PA; and inhibited by Cu²⁺, Zn²⁺, CTP, CDP, L-PI, DL-PG, L-PE, 2,3-DPG, and diolein. It is of interest that phorbol ester (TPA) can strongly stimulate the enzyme activity and the possible mechanism involving hydrophobic interaction between TPA and the enzyme was considered. It was also shown that the enzyme activity was inhibited by protein kinase C, possibly due to its phosphorylation.

AN 1995:288696 HCAPLUS <<LOGINID::20081029>>

DN 123:4132

OREF 123:863a,866a

TI Characterization of GD3 synthetase from rat liver cancer

AU Xie, Tianpei; Xia, Xiajuan; Gu, Tianjue

CS Sch. Basic Med. Sci., Shanghai Med. Univ., Shanghai, 200032, Peop. Rep. China

SO Shengwu Huaxue Yu Shengwu Wuli Xuebao (1994), 26(4), 437-40

CODEN: SHWPAU; ISSN: 0582-9879

PB Shanghai Kexue Jishu Chubanshe

DT Journal

LA Chinese

L21 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Lipid composition of neuronal cell bodies and neurites from cultured dorsal root ganglia

AB The lipid composition of neuronal somata and neuritic processes of cultured root ganglia has been determined. Neuronal soma contained 37% of dry weight as lipid (15.4% cholesterol, 4.8% galactolipid, and 57.1% phospholipid). The major phospholipids were phosphatidylcholine and phosphatidylethanolamine. Galactolipids consisted of cerebroside and sulfatide in molar ratio 2:1. The neuronal soma contained tetrasialo-, disialo-, and monosialoganglioside. In contrast, neurites contained 15% of the dry weight as lipid (22.1% cholesterol, 7.7% galactolipid with cerebroside and sulfatide in molar ratio 2:1, and 56.4% total phospholipid). The neuritic galactolipid content was higher, as was the percentage of sphingomyelin, and phosphatidylserine. The higher cholesterol content in neuritic lipid reflected the higher percentage of plasma membrane in this compartment. The ganglioside pattern of neurites was distinct from that of the neuronal soma and consisted entirely of gangliosides GQ1b, GT1b, GD1b, GD1a, and GD3, with no monosialogangliosides. The results indicate a preferential phospholipid and glycolipid sorting to the neuritic plasma membrane that may be related to the distinctive functions of this neuronal compartment.

AN 1995:270056 HCAPLUS <<LOGINID::20081029>>

DN 122:52158
 OREF 122:10013a,10016a
 TI Lipid composition of neuronal cell bodies and neurites from cultured dorsal root ganglia
 AU Calderon, R. O.; Attema, B.; DeVries, G. H.
 CS Dep. Biochemistry Molecular Biophysics, Medical College of Virginia, Richmond, VA, USA
 SO Journal of Neurochemistry (1995), 64(1), 424-9
 CODEN: JONRA9; ISSN: 0022-3042
 PB Lippincott-Raven
 DT Journal
 LA English

L21 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Membrane lipids of adult human brain: lipid composition of frontal and temporal lobe in subjects of age 20 to 100 years
 AB The membrane lipid composition of human frontal and temporal cortices and white matter has been studied in 118 subjects, age 20-100 yr. The brain specimens were selected from subjects who lived a normal social life and died suddenly and unexpectedly with no history of neurol. or psychiatric disease. Macroscopic and microscopic examns. ruled out any signs of organic brain disorder. The sudden death eliminated all risk of changes over a long agonal stage. The data for total solids and major lipids are summarized in graphic form. Total solids, phospholipids, and cholesterol diminished linearly from 20 yr of age in frontal and temporal cortices, whereas total solids phospholipids, cholesterol, cerebroside, and sulfatide showed a curvilinear diminution in frontal and temporal white matter. Gangliosides differed from the other lipids, showing an almost constant concentration between 20 and 70 yr of age with a slight peak around 50 yr of age. The ganglioside pattern showed continuous change and aging, with decreasing proportions of GM1 and GD1a and increasing proportions of GD1b, GM3, and GD3. Equations are given that can be used to calculate the lipid composition of normal human frontal and temporal cortices and white matter at any age between 20 and 100 yr of age. These data can be used where data be direct anal. are not available for comparison with values for various pathol. states.

AN 1994:652234 HCAPLUS <<LOGINID::20081029>>
 DN 121:252234
 OREF 121:45991a,45994a
 TI Membrane lipids of adult human brain: lipid composition of frontal and temporal lobe in subjects of age 20 to 100 years
 AU Svennerholm, L.; Bostrom, K.; Jungbjer, B.; Olsson, L.
 CS Dep. Forensic Med., Goeteborg Univ., Goeteborg, Swed.
 SO Journal of Neurochemistry (1994), 63(5), 1802-11
 CODEN: JONRA9; ISSN: 0022-3042
 DT Journal
 LA English

L21 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Glycolipid receptors for attachment of Mycoplasma hyopneumoniae to porcine respiratory ciliated cells
 AB Glycolipid receptors for Mycoplasma hyopneumoniae attachment were analyzed by using a thin-layer chromatog. (TLC) overlay assay. M. hyopneumoniae bound specifically to sulfatide, globoside, and monosialoganglioside GM3. No binding to sphingomyelin, cerebroside, lactosylceramide, ceramide trihexoside, monosialogangliosides GM1 and GM2, disialogangliosides (GD1a, GD1b, and GD3), trisialoganglioside (GT1b), cholesterol, cholesterol sulfate, palmitic acid, tripalmitin, or cholesteryl palmitate was detected. Total lipids

extracted from cilia of the swine respiratory epithelium, the natural targets of *M. hyopneumoniae* infection, were also separated on TLC plates and overlaid with mycoplasmas. *M. hyopneumoniae* bound specifically to three ciliary glycolipids identified as La, Lb, and Lc. Binding to Lc was stronger than to La and Lb. All three lipids were believed to be sulfated glycolipids, as determined by laminin binding and staining with azure A. Lc was identified as a putative sulfatide because it had a mobility similar to that of authentic sulfatide and co-migrated with sulfatide on TLC plates. Laminin bound to La, Lb, and Lc and produced dose-dependent inhibition of adherence of the mycoplasma to the three ciliary receptors. Binding of the mycoplasma to sulfatide, La, Lb, and Lc was partially inhibited by dextran sulfate, heparin, fucoidan, mucin, and chondroitin sulfate B. These substances blocked the adherence of *M. hyopneumoniae* to cilia and ciliated cells as shown in a previous study. These results indicate that La, Lb, and Lc are the major native receptors for *M. hyopneumoniae* adherence to ciliated cells.

AN 1994:627681 HCAPLUS <<LOGINID::20081029>>

DN 121:227681

OREF 121:41457a,41460a

TI Glycolipid receptors for attachment of *Mycoplasma hyopneumoniae* to porcine respiratory ciliated cells

AU Zhang, Qijing; Young, Theresa F.; Ross, Richard F.

CS Veterinary Med. Res. Inst., Iowa State Univ., Ames, IA, 50011, USA

SO Infection and Immunity (1994), 62(10), 4367-73

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

L21 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Human serum gangliosides in hypercholesterolemia, before and after extracorporeal elimination of LDL

AB Total content, pattern and transport by lipoproteins of gangliosides have been studied in the sera of 10 patients with hypercholesterolemia and manifest cardiovascular disease. Half of the patients with hypercholesterolemia and 3 healthy controls were treated with heparin-induced extracorporeal LDL precipitation (HELP). In the sera of the untreated group total gangliosides and cholesterol were elevated about 2-fold. Ratios of normal ganglioside components were not altered and abnormal ganglioside species not detected. Treatment with HELP resulted in an almost selective removal of lipid-bound sialic acid carried on LDL. The re-increase of total serum gangliosides was strictly correlated to that of LDL-cholesterol and apolipoprotein B. Total gangliosides and ratios of individual components carried on single LDL- and HDL-particles were not altered by the HELP treatment. Apparently, gangliosides are excreted into the serum along with nascent apolipoprotein B-containing lipoproteins, which are of hepatic origin. In hypercholesterolemia excretion of gangliosides into the circulation is elevated and surplus of circulating gangliosides is bound to increased nos. of 'atherogenic' LDL. Biosynthesis of different ganglioside components, most probably by the liver, and total amount of gangliosides bound to lipoprotein particles seem not to be altered.

AN 1992:589347 HCAPLUS <<LOGINID::20081029>>

DN 117:189347

OREF 117:32649a,32652a

TI Human serum gangliosides in hypercholesterolemia, before and after extracorporeal elimination of LDL

AU Senn, Hans Juergen; Orth, Mathias; Koester, Wolfgang; Wieland, Heinrich; Gerok, Wolfgang

CS Med. Universitaetsklin., Freiburg, Germany

SO Atherosclerosis (Shannon, Ireland) (1992), 94(23), 109-17

CODEN: ATHSBL; ISSN: 0021-9150

DT Journal
LA English

L21 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Altered cerebellar ganglioside pattern in Rett syndrome

AB Membrane lipids were examined in the cerebellum from five patients who died with Rett syndrome (RS). The major lipids of cerebellar folia and white matter did not show any difference compared with age-matched controls. There were slightly low values for cerebrosides, a biochem. marker for myelin, in cerebellar folia but high values in white matter of corpus medullare. The ganglioside concentration was reduced in one case which had shown marked astrocytosis at histol. examination Astrocyte associated gangliosides were increased in this case, but their proportion was also increased in the four other patients. Lacto series acidic glycosphingolipids, 3'-LM1 and LK1, closely associated with Purkinje cells were reduced in the Rett cases which fits well with neuropathol. examination demonstrating the loss of Purkinje cells. The most prominent finding was a decreased proportion of gangliosides GD1a and GT1b in cerebellar folia and white matter. The decreased proportion of GD1a might reflect an abnormality of synaptogenesis in RS and would be compatible with the clin. profile of this disease.

AN 1992:19201 HCAPLUS <<LOGINID::20081029>>

DN 116:19201

OREF 116:3377a,3380a

TI Altered cerebellar ganglioside pattern in Rett syndrome

AU Lekman, Annika; Hagberg, Bengt; Svennerholm, Lars

CS Dep. Psychiatry Neurochem., Univ. Goeteborg, Swed.

SO Neurochemistry International (1991), 19(4), 505-9

CODEN: NEUIDS; ISSN: 0197-0186

DT Journal

LA English

L21 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Ganglioside and phospholipid composition of forebrain, cerebellum, and brain stem from adult and newborn rats

AB It was determined whether sex or pregnancy state might affect the content and(or) pattern of gangliosides from the forebrain, cerebellum, and brain stem of rats. Adult male, mother (1-day after parturition), and nonpregnant rats of similar age were analyzed. Nonsignificant differences in ganglioside concns. and patterns were found for the resp. neural area of adult male and female rats except for a decrease in cerebellum and brain stem content from mothers and 12.0 mo-old males, resp. Thus, it seems that neither sex nor pregnancy hormones affect these parameters. By contrast, significant differences were found for pattern and ganglioside contents between adult (male and female) rats and newborns (1-day-old). Newborns showed a significant decrease in their forebrain (2.5-fold), cerebellum (2.0-fold), and brain stem (2.0-fold) ganglioside content when compared with adult (male and female) rats. Significant increases were found in the phospholipid and cholesterol contents in the different brain areas in mothers vs. their newborns. The phospholipid pattern also showed significant changes in all brain areas, with an increase in phosphatidylethanolamine percentage in adult animals, among the main variations. An explanation for these facts is suggested.

AN 1991:604455 HCAPLUS <<LOGINID::20081029>>

DN 115:204455

OREF 115:34837a,34840a

TI Ganglioside and phospholipid composition of forebrain, cerebellum, and brain stem from adult and newborn rats

AU Cabezas, Jose A.; Andres, Raquel; Hueso, Pablo; Llanillo, Marcial; Martinez-Zorzano, Vicenta S.; Rodrigo, Maximiliano; Sanchez-Yague, Jesus

CS Fac. Biol., Univ. Salamanca, Salamanca, 37008, Spain
SO Neurochemical Research (1991), 16(7), 781-5
CODEN: NEREDZ; ISSN: 0364-3190
DT Journal
LA English

L21 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Characterization and changes of glycosphingolipids in the aorta of the Watanabe hereditary hyperlipidemic rabbit

AB Characterization and elucidation of the changes of glycosphingolipids in the aorta along with the progression of atherosclerosis were performed in the Watanabe hereditary hyperlipidemic (WHHL) rabbit, an animal model for human familial hypercholesterolemia. Neutral glycosphingolipids in aortae of both normal and WHHL rabbits were composed of glucosylceramide, galactosylceramide, lactosylceramide, globotriaosylceramide, globotetraosylceramide, and galactosylneolacto-tetraosylceramide. The total amount of neutral glycosphingolipids in the aorta of the WHHL rabbit (557 nmol/g tissue) was increased about 5-fold compared to the normal level (107 nmol/g tissue). Prominent increases were observed in glucosylceramide (13-fold the normal level) and lactosylceramide (12-fold the normal level). The amount of total gangliosides in the aorta of the WHHL rabbit (207 μ g NeuAc/g tissue) was markedly increased, being about 12-fold the normal level (17 μ g NeuAc/g tissue). GM3 ganglioside, which was almost undetectable in normal aorta, also showed a marked increase in that of the WHHL rabbit (51.7 μ g NeuAc/g tissue). Sulfatide, which was absent in the aorta of the normal rabbit, was markedly accumulated in that of the WHHL rabbit (280 nmol/g tissue). The fatty acid composition of neutral glycosphingolipids of WHHL rabbit was found to include a higher amount of C23:0, which is the major fatty acid of glycolipids in serum lipoproteins. Gangliosides in the aorta of the WHHL rabbit contained more C16:0 than in the normal rabbit. Sphingosine of sulfatide in the aorta of the WHHL rabbit was composed of sphingenine (86%), sphinganine (9%), 4-D-hydroxysphinganine (4%), and 4-D-hydroxyeicosasphinganine (less than 1%). The results of fatty acid anal. of glycosphingolipids in the aorta of WHHL rabbit suggested that the various glycosphingolipids mostly derived from serum lipoproteins accumulated in the aorta of the WHHL rabbit with the progression of atherosclerosis, and that most of these glycolipids were hydrolyzed into less polar glycolipids such as glucosylceramide or lactosylceramide. On the other hand, the moderate increases in globotriaosylceramide, globotetraosylceramide, and galactosylneolactotetraosylceramide, which are ordinary constituents of the normal aorta, indicated the marked intimal thickening of the aorta of the WHHL rabbit. It is also suggested that GM3 and GD3 gangliosides were derived not only from sera but also from new-type cell populations, such as foam cells or macrophages in the atherosclerotic lesions, because the fatty acids of these gangliosides included more palmitic acid than those of either serum lipoproteins or the normal aorta. The most interesting finding was that the occurrence of sulfatide and GD3 ganglioside in the aorta of the WHHL rabbit may be a useful indicator of the degree of progression of atherosclerosis, since these glycosphingolipids were hardly detected in the normal aorta.

AN 1991:469469 HCAPLUS <<LOGINID::20081029>>

DN 115:69469

OREF 115:11963a,11966a

TI Characterization and changes of glycosphingolipids in the aorta of the Watanabe hereditary hyperlipidemic rabbit

AU Hara, Atsushi; Taketomi, Tamotsu

CS Sch. Med., Shinshu Univ., Nagano, 390, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1991), 109(6), 904-8
CODEN: JOBIAO; ISSN: 0021-924X

DT Journal
LA English

L21 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Altered concentrations, patterns and distribution in lipoproteins of serum gangliosides in liver diseases of different etiologies

AB Concns., patterns and distribution in different lipoprotein classes of human serum gangliosides were investigated in acute and chronic liver diseases of different etiologies. The total concns. of gangliosides were moderately elevated in sera of patients with cirrhosis and acute B or NANB virus hepatitis, but almost 3-fold in those with severe cholestasis. Up to three unknown gangliosides appeared in the sera of 6 out of 9 patients with alc. cirrhosis. They accounted for 11-27% of total serum gangliosides. In acute viral hepatitis very small amts. of these gangliosides were inconsistently detected. In severe cholestasis (bilirubin >10 mg/dL) the distribution of serum gangliosides was altered in different lipoprotein classes including lipoprotein X. The results indicate that the liver produces serum gangliosides. The diseased liver putatively affects the total concentration, pattern and distribution of serum gangliosides in different lipoprotein classes as a result of at least two different pathogenetic events: the qual. and quant. alterations of their biosynthesis and secretion into the circulation (cirrhosis); and the alteration of lipoprotein metabolism following cholestasis.

AN 1991:406251 HCAPLUS <<LOGINID::20081029>>

DN 115:6251

OREF 115:1247a,1250a

TI Altered concentrations, patterns and distribution in lipoproteins of serum gangliosides in liver diseases of different etiologies

AU Senn, H. J.; Orth, M.; Fitzke, E.; Schoelmerich, J.; Koester, W.; Wieland, H.; Gerok, W.

CS Med. Universitaetsklin. Freiburg, Freiburg, D-7800, Germany

SO Journal of Hepatology (1990), 11(3), 290-6

CODEN: JOHEEC; ISSN: 0168-8278

DT Journal

LA English

L21 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI A new monoclonal antibody directed to sialyl α 2-3lactoneotetraosylceramide and its application for detection of human gastrointestinal neoplasms

AB A new monoclonal antibody (NS24) directed to the N-acetylneuraminyllactoneotetraosylceramide [sialylparagloboside, IV3(NeuAc)nLc4Cer] was prepared by the hybridoma technique. Liposomes composed of dipalmitoylphosphatidylcholine, cholesterol, IV3(NeuAc)nLc4Cer, and lipopolysaccharides from Salmonella minnesota R595 were used for immunization with IV3(NeuAc)nLc4Cer isolated from human erythrocytes. This method allowed the fusion of spleen cells of immunized mouse with myeloma cells only 3 days after immunization. NS24 reacted specifically to both naturally occurring and chemical synthesized IV3-(NeuAc)nLc4Cer, whereas it has no reactivity to structurally related gangliosides, such as IV6(NeuAc)nLc4Cer, N-glycolylneuraminyllactoneotetraosylceramide [IV3(NeuGc)-nLc4Cer], i-active ganglioside [VI3(NeuAc)nLc6Cer], I-active ganglioside [VIIII3(NeuAc)-VI3(NeuAc)IV6kladoLc8Cer], GM4(NeuAc), GM3(NeuAc), GM3(NeuGc), GM1b(NeuAc), GD3-(NeuAc), other ganglio-series gangliosides, sulfatide, and paragloboside (nLc4Cer). Synthetic N-acetylneuraminyllactoneotetraosylceramide [IV3(NeuAc)Lc4Cer] and its asialo derivative (Lc4Cer) carrying type I sugar chain also showed no reaction with NS24. One to 100 pmol of IV3(NeuAc)nLc4Cer was detected dose-dependently by a thin-layer

chromatog./enzyme immunostaining procedure. Human gastric carcinomas showed pos. reactions with NS24 immunochem. and histochem. NS24 reacted preferentially with poorly differentiated adenocarcinomas rather than well differentiated ones.

AN 1991:160242 HCAPLUS <<LOGINID::20081029>>

DN 114:160242

OREF 114:26999a,27002a

TI A new monoclonal antibody directed to sialyl α 2-3lactoneotetraosylceramide and its application for detection of human gastrointestinal neoplasms

AU Suzuki, Yasuo; Nishi, Hiroshi; Hidari, Kazuya; Hirabayashi, Yoshio; Matsumoto, Makoto; Kobayashi, Toshiyuki; Watarai, Shinobu; Yasuda, Tatsuji; Nakayama, Jun; et al.

CS Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1991), 109(2), 354-60
CODEN: JOBIAO; ISSN: 0021-924X

DT Journal

LA English

L21 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Effects of various lysosphingolipids on cell growth, morphology and lipid composition in three neuroblastoma cell lines

AB The cell nos. of 3 mouse neuroblastoma cell lines were decreased on incubation with lysosphingolipids in the following order of effectiveness: lysosulfatide > psychosine > sphingosylphosphocholine (SPC). The different cell lines showed characteristic sensitivities to various concns. of lysolipids at <150 μ M. Interestingly, only SPC induced neurite outgrowth and changed the lipid composition, modifying the amts. of cholesterol, sphingomyelin (SM), and ganglioside GM3 in all cell lines. The effect of SPC on these cell lines was comparable to the effect of N-acetyl SPC rather than that of SM.

AN 1990:588792 HCAPLUS <<LOGINID::20081029>>

DN 113:188792

OREF 113:31899a,31902a

TI Effects of various lysosphingolipids on cell growth, morphology and lipid composition in three neuroblastoma cell lines

AU Sugiyama, Eiko; Uemura, Keiichi; Hara, Atsushi; Taketomi, Tamotsu

CS Sch. Med., Shinsu Univ., Matsumoto, 390, Japan

SO Biochemical and Biophysical Research Communications (1990), 169(2), 673-9
CODEN: BBRCA9; ISSN: 0006-291X

DT Journal

LA English

L21 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Differences in lipid composition between isolated growth cones from the forebrain and those from the brainstem in the fetal rat

AB The lipid composition of nerve growth cone membranes isolated from rat fetal forebrain or brainstem by the sucrose d. gradient method was analyzed biochem. and immunochem. In the forebrain, growth cone membrane (GCM) contained lower levels of gangliosides than those from other heavier fractions, but this was not the case in the fetal brainstem at the same development stage. The distinctive features in the ganglioside composition of GCM are the predominance of GD3 and the presence of c-series gangliosides that are due to fetal expression in mammals. A unique acidic glycolipid, sulfoglucuronylparagloboside (SGPG), which is not present in adult brains, was first detected in both forebrain and brainstem GCM. Including such minor species, the ganglioside composition in forebrain or brainstem GCM was almost identical to that of other membrane fractions from the forebrain or brainstem. The compositional ratios of the major lipid classes in membranes, cholesterol and

phospholipids, seemed to be common to forebrain GCM and brainstem GCM, as indicated by the identical values of phospholipid-to-protein (PL/Pr), cholesterol-to-protein (Ch/Pr), and cholesterol-to-phospholipid (Ch/PL) ratios for both. Thus, GCM isolated from forebrain, which apparently is at an earlier stage of neuronal differentiation than brainstem, has lower amts. of total gangliosides, a high proportion of GD3 to GD1a, and an enrichment in c-series gangliosides as compared to brainstems GCM.

AN 1990:96086 HCAPLUS <<LOGINID::20081029>>

DN 112:96086

OREF 112:16295a,16298a

TI Differences in lipid composition between isolated growth cones from the forebrain and those from the brainstem in the fetal rat

AU Igarashi, Michihiro; Waki, Hatsue; Hirota, Mitsue; Hirabayashi, Yoshio; Obata, Kunihiro; Ando, Susumu

CS Dep. Biochem., Jichi Med. Sch., Tochigi, Japan

SO Developmental Brain Research (1990), 51(1), 1-9
CODEN: DBRRDB; ISSN: 0165-3806

DT Journal

LA English

L21 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Ganglioside and lipid composition of bulk-isolated rat and bovine oligodendroglia

AB The ganglioside composition of 30-day and 60-day postnatal rat oligodendroglia, adult bovine oligodendroglia, gray matter, white matter, and myelin and also the total lipid composition of the oligodendroglial preps. were examined. The ganglioside patterns of rat and bovine oligodendroglia, as previously found for human oligodendroglia, were more complex than those of myelin. Apparently, oligodendroglial perikarya can synthesize many brain-type gangliosides, not all of which are incorporated into the compact myelin. Alternatively, the ganglioside composition of myelin may be altered in situ by the myelin-associated neuraminidase. In these 2 species, as in human, GM4 appears specific to oligodendroglia and myelin, whereas GD3 and GM3 are enriched in oligodendroglia but not myelin. In bovine oligodendrocytes GD3 is the major ganglioside. The total lipid concentration, as well as the percentage of cholesterol, sphingomyelin, phosphatidylinositol, and phosphatidylserine, differ for 30- and 60-day-old rat oligodendroglia and may be developmentally correlated with changes in myelin composition during myelinogenesis. There are also marked differences in the lipid composition of bovine oligodendroglia compared to rat oligodendroglia, with the former having more galactolipid and less ethanolamine phosphoglycerides.

AN 1989:475220 HCAPLUS <<LOGINID::20081029>>

DN 111:75220

OREF 111:12627a,12630a

TI Ganglioside and lipid composition of bulk-isolated rat and bovine oligodendroglia

AU Yu, Robert K.; Macala, L. J.; Farooq, M.; Sbaschnig-Agler, M.; Norton, W. T.; Ledeen, R. W.

CS Sch. Med., Yale Univ., New Haven, CT, USA

SO Journal of Neuroscience Research (1989), 23(2), 136-41
CODEN: JNREDK; ISSN: 0360-4012

DT Journal

LA English

L21 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Lysosulfatide (galactosylsphingosine-3-O-sulfate) from metachromatic leukodystrophy and normal human brain

AB The glycosphingolipid pattern was examined in 3 cases of late infantile

metachromatic leukodystrophy (MLD): one with a relatively short (2.5 yr), one with a long (7.8 yr), and one with a very long (13.2 yr) survival time. All values were compared with those of age-matched normal controls. The cerebroside concentration was reduced to 25, 12, and 4%, resp., in the MLD white matter, whereas the sulfatide concentration was increased up to 200% of

the

control value. The yield of myelin was reduced to <15% in the early case and to <3 and 1%, resp., in the 2 later cases. There was no sign of increased sulfatide proportion in the myelin. The ganglioside pattern was normal in cerebral gray matter, but in the white matter, contents of gangliosides of the lacto series were increased, in particular, the ganglioside suggested by the authors as being characteristic of reactive astrocytosis. For the first time, lysosulfatide was identified in MLD and normal human brains by mass spectrometry and radioimmunoaffinity TLC using specific monoclonal antibody. Its quantity was similar in normal and MLD brains. These findings support the authors' postulation that the lysoglycosphingolipids are synthesized de novo from sphingosine and that they do not play a key role in pathogenetic mechanisms.

AN 1989:437395 HCAPLUS <<LOGINID::20081029>>

DN 111:37395

OREF 111:6361a,6364a

TI Lysosulfatide (galactosylsphingosine-3-O-sulfate) from metachromatic leukodystrophy and normal human brain

AU Rosengren, Birgitta; Fredman, Pam; Maansson, Jan Eric; Svennerholm, Lars

CS Dep. Psychiatry Neurochem., Gothenburg Univ., Goeteborg, Swed.

SO Journal of Neurochemistry (1989), 52(4), 1035-41

CODEN: JONRA9; ISSN: 0022-3042

DT Journal

LA English

L21 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Morphological differentiation and change in the lipid composition of neuroblastoma C1300 cells under the effect of gangliosides

AB The effect of exogenous gangliosides on the morphol. differentiation of neuroblastoma 1300 N18 cells was studied. Simultaneously the content of gangliosides and lipid composition of the cells was investigated. Gangliosides were shown to increase the quantity of cells with long neurites. This effect depended on the dose of gangliosides. The addition of 50 and 100 µg of gangliosides per 4 mL of serum-free culture medium increased the quantity of cells with neurites by 38 and 63.4%, resp. The level of morphol. differentiation in cells cultivated with gangliosides was higher than in cells incubated with 5'-bromodeoxyuridine. Noticeable quantities of lysophosphatidylcholine (absent in the control) appeared in ganglioside-treated cells and the level of cholesterol increased. The amount of other lipid compds. in cells differentiated in the presence of gangliosides was similar, but not identical to the quantity of lipid compds. in cells differentiated by 5'-bromodeoxyuridine and by the serum-free medium.

AN 1989:437096 HCAPLUS <<LOGINID::20081029>>

DN 111:37096

OREF 111:6301a,6304a

TI Morphological differentiation and change in the lipid composition of neuroblastoma C1300 cells under the effect of gangliosides

AU Gulaya, N. M.; Voichuk, N. N.; Govseeva, N. N.; Volkov, G. L.; Avrova, N. F.; Nalivaeva, N. N.; Tyurina, Yu. Yu.

CS A. V. Palladin Inst. Biochem., Kiev, USSR

SO Ukrainskii Biokhimicheskii Zhurnal (1978-1999) (1989), 61(3), 72-9

CODEN: UBZHD4; ISSN: 0201-8470

DT Journal

LA Russian

L21 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI A new approach to the modification of cell membrane glycosphingolipids: ganglioside composition of JTC-12 P3 cells altered by feeding with galactose as a sole carbohydrate source in protein- and lipid-free synthetic medium

AB A significant difference in the glycosphingolipid composition of JTC-12 P3 cells established from monkey kidney tissue was observed when cells cultured in a protein- and lipid-free synthetic medium containing glucose (DM-160) as a sole carbohydrate source were transferred and cultured in the same medium containing galactose and pyruvic acid (DM-170) in place of glucose. In particular, the amts. of gangliosides GM3, GM2, and GD3 in the cells cultured in DM-170 were 5.3-, 17.8-, and more than 8-fold those in the cells cultured in DM-160, resp., indicating that anabolism of gangliosides is greatly enhanced in cells cultured in the presence of galactose and pyruvic acid, as compared with cells cultured in the presence of glucose. In fact, after cultivation of cells in the medium with N-acetyl-D-[14C]mannosamine for 96 h, the radioactivity incorporated into the gangliosides of the cells in DM-170 was 10-fold that of the cells in DM-160. Among the gangliosides of the cells in DM-170, highly sialylated mols. such as GD3, GD1a, GD1b, and GT1b were preferentially labeled, indicating that the sialyltransferases responsible for the synthesis of gangliosides are significantly more activated in cells cultured in DM-170 than in DM-160. Apparently, the glycosphingolipid composition of the plasma membrane can be modified epigenetically under well-defined conditions and provide important clues for clarifying the roles of glycosphingolipids associated with particular cell functions.

AN 1989:36404 HCAPLUS <<LOGINID::20081029>>

DN 110:36404

OREF 110:6013a,6016a

TI A new approach to the modification of cell membrane glycosphingolipids: ganglioside composition of JTC-12 P3 cells altered by feeding with galactose as a sole carbohydrate source in protein- and lipid-free synthetic medium

AU Kawaguchi, Tatsuya; Takaoka, Toshiko; Yoshida, Eiko; Iwamori, Masao; Takatsuki, Kiyoshi; Nagai, Yoshitaka

CS Fac. Med., Univ. Tokyo, Tokyo, 113, Japan

SO Experimental Cell Research (1988), 179(2), 507-16
CODEN: ECREAL; ISSN: 0014-4827

DT Journal

LA English

L21 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Gangliosides and other lipids of the growth cone membrane

AB Growth cone membranes (GCM), derived from growth cone particles isolated from 16-18-day-old fetal rat brain, were rich in overall lipid content with a lipid-to-protein ratio of 3.5. The phospholipid-to-cholesterol ratio indicated considerably less cholesterol than in plasma membranes from mature neurons. All major classes of phospholipid were present in the usual proportions except sphingomyelin, which could not be detected. Gangliosides expressed in relation to protein were present at somewhat higher levels compared to previously reported values for synaptic plasma membranes (73 vs. 44 $\mu\text{g}/\text{mg}$ protein), but when related to phospholipid their level was well below that of the latter (26 vs. 62 $\mu\text{g}/\text{mg}$ phospholipid). The ganglioside pattern was generally similar to that of mature synaptic membranes except for the presence of relatively more GD3 and less GD1a, a phenomenon also observed in whole fetal brain of the same age. Several neutral glycosphingolipids were detected, glucosylceramide being the major

one of this group. Their total level in GCM was roughly comparable to that of gangliosides, but unlike the latter their concentration in whole brain decreased with development. For comparison, the ganglioside composition of mixed membrane fractions from the same fetal brains was analyzed, and no significant differences were found between these and GCM, suggesting that these glycoconjugates are not localized specifically in the growth cones. Neutral glycosphingolipids, on the other hand, appeared somewhat more concentrated in growth cones than in the mixed membranes.

AN 1988:452266 HCAPLUS <<LOGINID::20081029>>

DN 109:52266

OREF 109:8771a,8774a

TI Gangliosides and other lipids of the growth cone membrane

AU Sbaschnig-Agler, Michele; Pfenninger, Karl H.; Ledeen, Robert W.

CS Dep. Neurol. Biochem., Albert Einstein Coll. Med., Bronx, NY, USA

SO Journal of Neurochemistry (1988), 51(1), 212-20

CODEN: JONRA9; ISSN: 0022-3042

DT Journal

LA English

L21 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Large alterations in ganglioside and neutral glycosphingolipid patterns in brains from cases with infantile neuronal ceroid lipofuscinosis/polyunsaturated fatty acid lipidosis

AB Lipid composition was studied on cerebral tissue from 9 children who had died of infantile form of neuronal ceroid lipofuscinosis (INCL) or polyunsatd. fatty acid lipidosis (PFAL). In the terminal stage of the disease, the concns. of all lipid classes were reduced in the cerebral and cerebellar cortex and white matter. The concentration of gangliosides of the cerebral cortex was 15% and that of cerebrosides (galactosylceramide) in white matter 0.2-5% of the normal values for the children's ages. The reduction of gangliosides mainly affected those of the gangliotetraose series, particularly GD1a. The fatty acids of the linolenic acid series were strongly reduced in ethanolamine and serine phosphoglycerides. A very large increase up to 100-fold of oligoglycosphingolipids of the globo series and 2 fucose-containing lipids of the neolacto series was found in the forebrain of the 3 advanced cases examined. The brain tissue also contained very high concns. of mono-, di-, and trisialogangliosides of the lacto and neolacto series, gangliosides with type 1 chain dominating. The structures of the gangliosides were tentatively identified. The gangliosides and neutral glycosphingolipids had very similar fatty acid composition, consisting of .apprx.40% stearic acid and 40% C24-acids.

AN 1988:219852 HCAPLUS <<LOGINID::20081029>>

DN 108:219852

OREF 108:36059a,36062a

TI Large alterations in ganglioside and neutral glycosphingolipid patterns in brains from cases with infantile neuronal ceroid lipofuscinosis/polyunsaturated fatty acid lipidosis

AU Svennerholm, Lars; Fredman, Pam; Jungbjer, Birgitta; Maansson, Jan Eric; Rynmark, Britt Marie; Bostroem, Kerstin; Hagberg, Bengt; Noren, Lars; Santavuori, Pirkko

CS St. Joergen's Hosp., Goeteborg Univ., Hisings Backa, S-42203, Swed.

SO Journal of Neurochemistry (1987), 49(6), 1772-83

CODEN: JONRA9; ISSN: 0022-3042

DT Journal

LA English

L21 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Compositions containing lipid molecules with enhanced angiogenic activity

AB Lipids, including gangliosides, phospholipids, ceramides, cerebrosides, sphingosides, neutral lipids, and lecithin promote the growth of blood vessels. These lipids may be derived from omental tissues, especially feline

omental tissue. Feline omentum was homogenized and centrifuged and the lipid fraction was extracted with CHCl₃-MeOH to give a crude fraction (I). I was further fractionated and the fractions were characterized. The femoral arteries were removed from cats, and the cats were injected i.m. with I. Neovascularization occurred much more rapidly in cats treated with I than in untreated controls. A number of known lipid preps. were tested for angiogenic activity; a mixture of Sapelco mono-, di-, and tri-sialogangliosides was the most effective.

AN 1987:605160 HCAPLUS <<LOGINID::20081029>>

DN 107:205160

OREF 107:32842h,32843a

TI Compositions containing lipid molecules with enhanced angiogenic activity

IN Catsimpoalas, Nicholas; McCluer, Robert S.; Sinn, Robert S.; Evans, James

PA Anglo-Medical Corp., USA; Boston University

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	-----	----	-----	-----	-----	
PI	WO 8701939	A1	19870409	WO 1986-US2064	19861001	<--
	W: AU, DK, FI, HU, JP, KR, NO					
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE					
	US 4710490	A	19871201	US 1985-782724	19851001	<--
	AU 8665488	A	19870424	AU 1986-65488	19861001	<--
	EP 240562	A1	19871014	EP 1986-906539	19861001	<--
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
	HU 44176	A2	19880229	HU 1986-5236	19861001	<--
	JP 63502341	T	19880908	JP 1986-505830	19861001	<--
	ZA 8607852	A	19870624	ZA 1986-7852	19861016	<--
	DK 8702767	A	19870529	DK 1987-2767	19870529	<--
	NO 8702267	A	19870529	NO 1987-2267	19870529	<--
	FI 8702438	A	19870601	FI 1987-2438	19870601	<--
	US 4888324	A	19891219	US 1987-116014	19871102	<--
	US 4710490	B1	19890829	US 1988-90001601	19880908	<--
PRAI	US 1985-782724	A	19851001	<--		
	WO 1986-US2064	A	19861001	<--		

L21 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Lipid composition of human malignant brain tumors

AB Malignant transformation is characterized by the uncontrolled proliferation of cells, and changes in the composition of glycolipids, a cell surface component which may be involved in regulation of cell growth, were often observed in malignant transformation. In this study, cholesterol, lipid-bound P, cerebroside, sulfatide, and ganglioside were quantitated in the tissue of 20 human malignant brain tumors (malignant glioma, low-grade glioma, metastatic tumor, malignant meningioma). As compared with normal brain, all tumor tissue contained lower cholesterol, sialic acid, cerebroside, and sulfatide. Metastatic brain tumor or glioma showed characteristic patterns in the content of ganglioside, cerebroside, and sulfatide, resp. The ganglioside patterns of metastatic tumor or glioma contained a greater proportion of structurally simpler gangliosides than normal brain, and in metastatic tumor, GM3 was a major ganglioside. On the contrary, glioma had an increased proportion of GM3 and GD3 gangliosides. High-grade glioma, such as Grade 3-4, contained a higher proportion of GM3 and GD3, whereas low-grade glioma (Grade 1-2) contained a lower proportion of GM3 and GD3.

AN 1987:456753 HCAPLUS <<LOGINID::20081029>>

DN 107:56753
 OREF 107:9411a,9414a
 TI Lipid composition of human malignant brain tumors
 AU Nakamura, Osamu; Ishihara, Eiko; Iwamori, Masao; Nagai, Toshitaka; Matsutani, Masao; Nomura, Kazuhiro; Takakura, Kintomo
 CS Dep. Neurosurg., Tokyo Metropol. Komagome Hosp., Tokyo, 113, Japan
 SO Brain and Nerve (1987), 39(3), 221-6
 CODEN: BRNED8; ISSN: 0006-8969
 DT Journal
 LA Japanese

L21 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Characterization of feline omentum lipids
 AB Feline omental lipid exts., previously reported to be angiogenic in the cornea of rabbits, were fractionated and the major lipid components characterized. Approx. 97% of the CHCL3/MeOH extract consisted of triglycerides containing primarily 16:0, 18:0, 18:1, and 18:2 fatty acids. Trace quantities of free fatty acids, cholesterol, and di- and monoglycerides were also detected. The phospholipid fraction, obtained by solvent partition and Unisil column chromatog. and characterized by HPLC-mass spectrometry, consisted of phosphatidylcholine, sphingomyelin, phosphatidylethanolamine, and phosphatidylserine. The neutral glycolipids, isolated by solvent partition and Unisil column chromatog. and identified by high performance TLC and HPLC of their perbenzoylated derivs., consisted of glucosyl- and galactosylceramides, galabiosylceramide, lactosylceramide, globotriaosylceramide, and globotetraosylceramide. The complex glycolipid fraction, obtained from Folch upper phase solvent partition, consisted primarily of Forssman glycolipid and gangliosides GM3 and GD3. Smaller amts. of GM1 and other unidentified gangliosides were also present.
 AN 1987:421118 HCAPLUS <<LOGINID::20081029>>
 DN 107:21118
 OREF 107:3531a,3534a
 TI Characterization of feline omentum lipids
 AU McCluer, Robert H.; Evans, James E.; Williams, Marcia; Griffith, Ann L.; Catsimpoalas, Nicholas
 CS Biochem. Dep., Eunice Kennedy Shriver Cent., Waltham, MA, 02254, USA
 SO Lipids (1987), 22(4), 229-35
 CODEN: LPDSAP; ISSN: 0024-4201
 DT Journal
 LA English

L21 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
 TI Glycolipids of the bovine pineal organ and retina
 AB Neutral and acidic glycolipids from the bovine pineal organ and neutral glycolipids from the bovine retina were characterized. The chemical structures of the isolated glycolipids were determined by means of carbohydrate anal., methylation anal., enzyme treatment, fatty acid anal., long-chain base anal., mass spectrometry, and NMR and IR spectroscopy. GM3, GD3, and GT1 were the major bovine pineal organ gangliosides, GD3 accounting for 75% of the total gangliosides. Galactosylceramide, glucosylceramide, and lactosylceramide were found in both the bovine pineal organ and retina. Sulfatide was also present in both tissues. It was previously reported that the major bovine retina ganglioside was GD3 (Handa, S.; Burton, R.M., 1969). The glycolipid patterns of the 2 tissues were very similar to each other and quite different from those of other tissues.
 AN 1987:116960 HCAPLUS <<LOGINID::20081029>>
 DN 106:116960
 OREF 106:19077a,19080a
 TI Glycolipids of the bovine pineal organ and retina

AU Matsui, Eriko; Ogura, Kiyoshi; Handa, Shizuo
CS Fac. Med., Tokyo Med. Dent. Univ., Tokyo, 113, Japan
SO Journal of Biochemistry (Tokyo, Japan) (1987), 101(2), 423-32
CODEN: JOBIAO; ISSN: 0021-924X
DT Journal
LA English

L21 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Gangliosides of human thyroid gland

AB The ganglioside composition of adult human thyroid gland was examined in autopsy material obtained from patients who died of circulatory diseases, but who showed no signs of thyroid disorders. The concns. of phospholipids, cholesterol, and gangliosides (lipid-bound sialic acid) in the whole glands were 5.2, 4.3, and 0.12 mmol/kg fresh tissue weight and, in dissected follicular material, 7.0, 3.4, and 0.24 mmol/kg tissue, resp. The molar ratio of phospholipids/cholesterol/gangliosides in the follicular material was 1.00:0.49:0.034. Twelve mol. species of gangliosides were isolated and identified. Gangliosides GM3 and GD3 were most abundant, but GD1a, GD1b, GT1b and 3'-LM1 were also present in quantities >5% of the total gangliosides. N-Acetylneuraminic acid and an alkali-labile sialic acid, probably N-acetyl-9-O-acetylneuraminic acid, occurred in human thyroid.

AN 1985:451688 HCAPLUS <<LOGINID::20081029>>

DN 103:51688

OREF 103:8287a,8290a

TI Gangliosides of human thyroid gland

AU Svennerholm, Lars

CS Dep. Psychiat. Neurochem., Univ. Goeteborg, Hisings Backa, S-422 03, Swed.

SO Biochimica et Biophysica Acta, Lipids and Lipid Metabolism (1985), 835(2), 231-5

CODEN: BBLA6; ISSN: 0005-2760

DT Journal

LA English

L21 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Isolation and determination of cholesterol glucuronide in human liver

AB Cholesterol β -glucuronide (I) was purified and quantitated in liver of normal subjects and patients with GM1-gangliosidosis type II by chromatog. on DEAE-Sephadex A 25, elution of the acidic lipids with CHCl₃-MeOH-NaOAc (30:60:8), removal of the free fatty acids by silica gel chromatog., preparative TLC of the acidic lipids on silica gel 60, and liquid chromatog. on a column of silica gel 60. TLC of the acidic lipids indicated 2 major bands corresponding to I and ganglioside GM3 and a minor band having the same R_f value as ganglioside GD3. I could not be distinguished readily from ganglioside GM4 by TLC. Anal. of the sugar components by gas chromatog. showed that GM3 and GD3 contained glucose and galactose in the molar ratio 1:1.1. The identity of I was confirmed by cleavage of the linkage between cholesterol and glucuronic acid by β -D-glucuronidase. The contents of I were 32.5 and 89.8 nmol/g in normal and patient liver, resp., and it was absent in spleen and brain.

AN 1982:541129 HCAPLUS <<LOGINID::20081029>>

DN 97:141129

OREF 97:23431a,23434a

TI Isolation and determination of cholesterol glucuronide in human liver

AU Hara, Atsushi; Taketomi, Tamotsu

CS Sch. Med., Shinshu Univ., Matsumoto, 390, Japan

SO Lipids (1982), 17(8), 515-18

CODEN: LPDSAP; ISSN: 0024-4201

DT Journal
LA English

L21 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Neutral glycosphingolipids and gangliosides of bovine thyroid

AB By the application of a ganglioside-mapping technique, the lipid composition of bovine thyroid was analyzed systematically. The contents of cholesterol, lipid-bound P, and lipid-bound sialic acid in bovine thyroid were 5.10, 9.76, and 0.28 $\mu\text{mol/g}$ of dry tissue, resp., and the molar ratio of cholesterol, lipid-bound sialic acid, and lipid-bound P was 52.4 : 2.9 : 100.0. The following phospholipids were contained in this order: phosphatidylcholine > phosphatidylethanolamine > sphingomyelin > phosphatidylserine and phosphatidylinositol > cardiolipin. When compared on a molar basis, the amount of total glycosphingolipids was only 3% of phospholipids. As the major neutral glycosphingolipids, ceramide glucoside, ceramide galactoside, ceramide lactoside, ceramide trihexoside, and globoside were identified and the most abundant component was globoside (40% of total neutral glycosphingolipids). On the other hand, 5 mol. species of gangliosides were identified: GM3, GM1, fucosyl GM1, GD3, and GD1a. Three types of GD3 and GD1a with a different sialic acid composition were recognized on the ganglioside map and isolated in pure forms. GM3 was the most abundant component, but the concentration of gangliosides with ganglio-N-tetraose in bovine thyroid was higher than that of gangliosides with lactose. Also fucosyl GM1 comprised 13% of total gangliosides. Thus, the high concns. of gangliosides with ganglio-N-tetraose and fucosyl GM1 seemed to be characteristic of bovine thyroid glycosphingolipids. The glycosphingolipids contained in the following order: GM3 > GD1a > globoside > GM1 > ceramide trihexoside > fucosyl GM1 > ceramide lactoside > ceramide glucoside > GD3 > ceramide galactoside.

AN 1982:453044 HCAPLUS <<LOGINID::20081029>>

DN 97:53044

OREF 97:8902h,8903a

TI Neutral glycosphingolipids and gangliosides of bovine thyroid

AU Iwamori, Masao; Sawada, Kenzo; Hara, Yoshiko; Nishio, Minori; Fujisawa, Takashi; Imura, Hiroo; Nagai, Yoshitaka

CS Fac. Med., Univ. Tokyo, Tokyo, 113, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1982), 91(6), 1875-87

CODEN: JOBIAO; ISSN: 0021-924X

DT Journal

LA English

L21 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Lipid patterns of embryonal carcinoma cell lines and their derivatives: changes with differentiation

AB The lipid composition of several teratocarcinoma cell lines has been examined by

biochem. and immunol. methods in order to identify properties that might be correlated with the state of cell differentiation. The data indicate qual. and quant. changes in the phospholipid, cholesterol, and glycolipid composition. In particular, the ratios of cholesterol/phospholipid and of sphingomyelin/phosphatidylcholine are higher in differentiated cells. Gangliosides with short glycosidic chains (GM3 and GD3) are characteristic of undifferentiated, multipotent, embryonal carcinoma cell lines. More complex gangliosides (GM1 and GD1a) appear early during the course of differentiation. Each differentiated cell line presents a unique ganglioside map. Results are tentatively correlated with a stabilization of the membrane bilayer in differentiated cell lines, whereas a more fluid state of the membrane in embryonal carcinoma cell lines would allow maximal

flexibility. Subtle differences in ganglioside composition among embryonal carcinoma cell lines are discussed in relation with their potentialities, and their developmental age.

AN 1981:189635 HCAPLUS <<LOGINID::20081029>>

DN 94:189635

OREF 94:31011a,31014a

TI Lipid patterns of embryonal carcinoma cell lines and their derivatives: changes with differentiation

AU Coulon-Morelec, Marie Josephe; Buc-Caron, Marie Helene

CS Unite Biochim. Antigenes, Inst. Pasteur, Paris, 75724/15, Fr.

SO Developmental Biology (Orlando, FL, United States) (1981), 83(2), 278-90

CODEN: DEBIAO; ISSN: 0012-1606

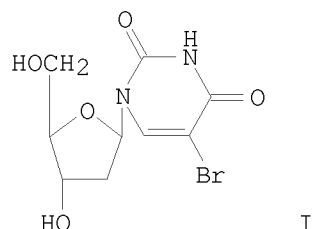
DT Journal

LA English

L21 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Membrane lipids in bromodeoxyuridine-differentiated astroglial cells in culture

GI



AB Embryonic hamster astroblasts (NN strain) grown in continuous line were cultivated in the presence of 5-bromodeoxyuridine (I) [59-14-3]. A decrease in the growth rate of the cells and striking changes in their morphol. were observed, the morphol. of the cells resembling that of mature astrocytes. Membrane lipids of I-differentiated and standard cells were compared. No modification of the lipid/protein ratio was observed. Phospholipids and cholesterol [57-88-5] were increased in the same proportions in the cells, and no modification of the phospholipid distribution was observed. Ganglioside sialic acid remained at the same level, but the ganglioside distribution was highly modified. Complex gangliosides Gm1 [37758-47-7] and Gd1a [12707-58-3] appeared, whereas the proportion of simple gangliosides GM3 [54827-14-4] and GD3 [62010-37-1] decreased. However, neither GT1 nor GQ1 were detected in differentiated cells. The distribution of phosphoglyceride acyl groups was highly modified, the proportion of arachidonic [506-32-1] and docosapentaenoic acid [25448-00-4] being 2-3-fold higher in I-treated cells than in proliferating ones. These results were compared to those obtained with another clonal line of glial cells (C6) which exhibited no morphol. differentiation in the presence of I; the lipids of these cells were not modified by such a treatment.

AN 1980:105026 HCAPLUS <<LOGINID::20081029>>

DN 92:105026

OREF 92:17061a,17064a

TI Membrane lipids in bromodeoxyuridine-differentiated astroglial cells in culture

AU Robert, J.; Mandel, P.; Rebel, G.

CS Lab. Biochim. Med. A, Univ. Bordeaux 2, Bordeaux, 33076, Fr.

SO Lipids (1979), 14(10), 852-9
CODEN: LPDSAP; ISSN: 0024-4201
DT Journal
LA English

L21 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Lipid composition of human malignant melanoma tumors at various levels of malignant growth
AB The lipid pattern of 13 human melanoma tumors from various tissues were investigated. In 7 of the tumors, an estimate was given about the proportion of malignant melanocytes to the total cell population, and a reverse correlation was determined between the proportion of malignant cells in these tumors and their neutral lipid content. The phospholipids did not show any modification, nor did the cholesterol in the cancerous tissues. The ganglioside pattern was similar in all analyzed samples, with GM3, GM2, and GD3 as major components, although no correlation was found between the malignant level and the ganglioside content of the tumors.

AN 1979:184509 HCAPLUS <<LOGINID::20081029>>

DN 90:184509

OREF 90:29301a,29304a

TI Lipid composition of human malignant melanoma tumors at various levels of malignant growth

AU Portoukalian, Jacques; Zwingelstein, Georges; Dore, Jean Francois

CS Lab. Physiol. Gen. Comp., Univ. Claude Bernard, Villeurbanne, Fr.

SO European Journal of Biochemistry (1979), 94(1), 19-23

CODEN: EJBCAI; ISSN: 0014-2956

DT Journal

LA English

L21 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Lipids in bovine adrenal-medullary chromaffin granules: structure, location, and accessibility in the membrane of gangliosides, and lactosylceramide sialyltransferase activity
AB Bovine adrenal medullary chromaffin granules were rich in cholesterol, phospholipids, and gangliosides. The major phospholipids were phosphatidylethanolamine and phosphatidylcholine, with large amts. of ethanolamine plasmalogens and lysophosphatidylcholine. Ganglioside GM3 constituted >95% of the total gangliosides; GD3 and GD1a were also detected. The chromaffin granule contained <2% of the total sialyltransferase (EC 2.4.99.1) activity and in this fraction, activity occurred in the plasma membrane and Golgi apparatus Neuraminidase (EC 3.2.1.18) released sialic acid residues firstly from glycoproteins and then from gangliosides.

AN 1978:487694 HCAPLUS <<LOGINID::20081029>>

DN 89:87694

OREF 89:13392h,13393a

TI Lipids in bovine adrenal-medullary chromaffin granules: structure, location, and accessibility in the membrane of gangliosides, and lactosylceramide sialyltransferase activity

AU Dreyfus, H.; Pescheloché, M.; Harth, S.; Mandel, P.; Aunis, D.

CS Cent. Neurochim., CNRS, Strasbourg, Fr.

SO Biochemical Society Transactions (1978), 6(1), 312-14

CODEN: BCSTB5; ISSN: 0300-5127

DT Journal

LA English

L21 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Gangliosides, glycoproteins, and glycosaminoglycans in Krabbe's disease
AB Quant. anal. of postmortem gray matter from a 20-month-old child with Krabbe's disease revealed a small elevation of the cerebrosides:sulfatides

ratio. This was largely due to a 50% reduction in sulfatide content. No marked change was noted in the cholesterol level nor were there any changes in the concentration of various phospholipids. A somewhat reduced value for ganglioside N-acetylneuraminic acid content was noted. Gangliosides GM3, GM2, GD3, and GD2 showed a relative increase while the relative amounts of GMI, GD1b, and GT were reduced. No large changes were noted in the concentration of glycosaminoglycans or the glycopeptides derived from brain glycoproteins. The nondialyzable glycopeptides appeared to be slightly elevated in concentration but relatively poorer in fucose (I) content. The reduction of the I content of both nondialyzable and dialyzable glycopeptide preparations suggests that some of the heteropolysaccharide chains lack terminal I groups.

AN 1974:13352 HCAPLUS <<LOGINID::20081029>>

DN 80:13352

OREF 80:2241a,2244a

TI Gangliosides, glycoproteins, and glycosaminoglycans in Krabbe's disease

AU Berra, Bruno; Brunngraber, Eric G.; Aguilar, Virginia; Aro, Aurelia; Zambotti, V.

CS Fac. Med., Univ. Milano, Milan, Italy

SO Clinica Chimica Acta (1973), 47(2), 325-8
CODEN: CCATAR; ISSN: 0009-8981

DT Journal

LA English

L21 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Altered levels of tissue glycoproteins, gangliosides, glycosaminoglycans and lipids in Niemann-Pick's disease

AB The concentration of sphingomyelin, gangliosides, glycosaminoglycans, and glycoprotein carbohydrate was elevated in brain tissue from a case of Niemann-Pick's disease. Liver showed increased levels of cholesterol, sphingomyelin, phospholipids, gangliosides, and lactosyl ceramide. The urinary sediment contained a high concentration of sphingomyelin. The gangliosides GM3, GM2, and GD3 were elevated in brain tissue. The elevation of ganglioside GD3 was especially pronounced in liver. The two-fold increase in glycoprotein carbohydrate was due to increased levels of glycoprotein material bearing nondialyzable, higher mol. weight heteropolysaccharide units containing N-acetylneuraminic acid, fucose, N-acetylglucosamine, galactose, and mannose. These polysaccharides also differed in composition inasmuch as they appeared to be deficient in the linear external chains consisting of -N-acetylglucosaminegalactose-N-acetylneuraminic acid that are attached to the internal mannose-rich core of the heteropolysaccharide unit. There was no increase in the concentration of glycoprotein material bearing the dialyzable heteropolysaccharide units of lower mol. weight and which contain predominantly mannose and N-acetylglucosamine. Brain glycosaminoglycans showed a two-fold elevation. The substances which accumulated in tissues in this case of Niemann-Pick's disease are constituents of the plasma membrane, suggesting that the block in the degradation of sphingomyelin may have the secondary effect of impeding the catabolism of other membrane constituents.

AN 1974:13335 HCAPLUS <<LOGINID::20081029>>

DN 80:13335

OREF 80:2237a,2240a

TI Altered levels of tissue glycoproteins, gangliosides, glycosaminoglycans and lipids in Niemann-Pick's disease

AU Brunngraber, Eric G.; Berra, Bruno; Zambotti, V.

CS Illinois State Psychiatr. Inst., Chicago, IL, USA

SO Clinica Chimica Acta (1973), 48(2), 173-81
CODEN: CCATAR; ISSN: 0009-8981

DT Journal

LA English

=> d his

(FILE 'HOME' ENTERED AT 13:40:17 ON 29 OCT 2008)

FILE 'REGISTRY' ENTERED AT 13:40:28 ON 29 OCT 2008

L1 STRUCTURE UPLOADED

L2 4 S L1

L3 45 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 13:41:58 ON 29 OCT 2008

L4 15 S L3

L5 12049 S GANGLIOSIDE

L6 9736 S GD3 OR GM3

L7 330336 S INFLAMM?

L8 423224 S INFLAMM? OR ANTIINFLAMM? OR ARTHRITIS OR ALLERG?

L9 205148 S CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM?

L10 30478 S INFANT

L11 88 S L5 AND L6 AND L8

L12 11 S L5 AND L6 AND L8 AND L9

L13 5 S L12 AND (PY<2004 OR AY<2004 OR PRY<2004)

L14 5 S L5 AND L6 AND L8 AND L10

L15 5 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

L16 185 S L5 AND L6 AND L9

L17 3 S L5 AND L6 AND L9 AND L10

L18 951 S GD3 AND GM3

L19 2 S L17 AND L18

L20 44 S L16 AND L18

L21 36 S L20 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> log hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	257.06	436.55
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-52.80	-52.80

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:48:16 ON 29 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *

SESSION RESUMED IN FILE 'HCAPLUS' AT 17:25:17 ON 29 OCT 2008

FILE 'HCAPLUS' ENTERED AT 17:25:17 ON 29 OCT 2008

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
----------------------	------------	-------

FULL ESTIMATED COST	ENTRY 257.06	SESSION 436.55
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-52.80	-52.80

```
=> s bovine colostrum
      175945 BOVINE
      6145 COLOSTRUM
L22      601 BOVINE COLOSTRUM
          (BOVINE (W) COLOSTRUM)
```

```
=> s GD3 and GM3
      7774 GD3
      2913 GM3
L23      951 GD3 AND GM3
```

```
=> s l22 and l23
L24      1 L22 AND L23
```

```
=> d l24 ti abs bib
```

L24 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation and use of neoglycoproteins containing sugar moieties of gangliosides GM3 and GD3 for tumor diagnosis and therapy

AB Mono- and disialolactose (the sugar moieties of gangliosides GM-3 and GD-3, resp.) are isolated from bovine colostrum, coupled to human serum albumin (HSA) as a carrier, and used (1) as vaccines for treatment of tumors expressing GM-3 and GD-3, or (2) to elicit antibodies for immunodiagnosis of such tumors. Thus, mono- and disialolactose were isolated from bovine colostrum by defatting by centrifugation, precipitation of proteins with cold 50% acetone, concentration, desalting, and ion-exchange chromatog. They were then reductively

aminated, derivatized with N-succinimidyl 3-(2-pyridyldithio)propionate, and coupled to HSA. The disialolactose-HSA conjugate reacted with monoclonal antibodies to GD-3 in a Western blot assay, and was more immunogenic than GD-3 in mice.

AN 1991:40915 HCAPLUS <<LOGINID::20081029>>

DN 114:40915

OREF 114:7131a,7134a

TI Preparation and use of neoglycoproteins containing sugar moieties of gangliosides GM3 and GD3 for tumor diagnosis and therapy

IN Wiegand, Herbert; Bosslet, Silke; Bosslet, Klaus; Sedlacek, Hans Harald

PA Behringwerke A.-G., Germany

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 3837623	A1	19900510	DE 1988-3837623	19881105
	EP 368131	A2	19900516	EP 1989-120245	19891102
	EP 368131	A3	19901219		
	EP 368131	B1	19960904		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 02173000	A	19900704	JP 1989-285094	19891102

JP 2838147	B2	19981216		
AT 142229	T	19960915	AT 1989-120245	19891102
ES 2093612	T3	19970101	ES 1989-120245	19891102
CA 2002218	A1	19900505	CA 1989-2002218	19891103
CA 2002218	C	20000808		
DK 8905495	A	19900506	DK 1989-5495	19891103
AU 8944368	A	19900510	AU 1989-44368	19891103
AU 630634	B2	19921105		
KR 162635	B1	19981116	KR 1989-15922	19891103
PRAI DE 1988-3837623	A	19881105		

=> s ganglioside
L25 12049 GANGLIOSIDE

=> s composition
L26 742386 COMPOSITION

=> s 122 and 125 and 126
L27 0 L22 AND L25 AND L26

=> s 122 and 125
L28 3 L22 AND L25

=> d 128 1-3 ti

L28 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation and use of neoglycoproteins containing sugar moieties of gangliosides GM3 and GD3 for tumor diagnosis and therapy

L28 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Biosynthesis of terminal Gal α 1 \rightarrow 3Gal β 1 \rightarrow 4GlcN
Ac-R oligosaccharide sequences on glycoconjugates. Purification and acceptor specificity of a UDP-Gal:N-acetyllactosaminide α 1 \rightarrow 3-galactosyltransferase from calf thymus

L28 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Inducible neuraminidase (N-acyl-neuraminyd hydrolase EC 3.2.1.18) of *Klebsiella aerogenes* NCIB 9479

=> s buffalo milk
8388 BUFFALO
169021 MILK
L29 1520 BUFFALO MILK
(BUFFALO(W)MILK)

=> s 123 and 129
L30 2 L23 AND L29

=> d 130 1-2 ti abs bib

L30 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Isolation and identification of buffalo milk gangliosides and their use for humanization of infant and other formulas
AB The present invention relates to gangliosides derived or isolated from buffalo milk, skimmed buffalo milk, buffalo milk serum or derivs. of either.
Buffalo milk is reported to comprise gangliosides that are not contained in bovine milk, such as gangliosides that belong to the GM1-class. Furthermore, buffalo milk is found to

comprise unknown gangliosides, denoted herein as ganglioside "F" and "L". Furthermore, the invention reports that gangliosides are surprisingly found in fractions of isolation procedures that were so far not considered to comprise gangliosides. Finally, milk or milk serum from buffalo, for example as derived from mozzarella cheese production, contains specific gangliosides in the same amts. as human breast milk, which makes it suitable for humanization of infant and other formulas. Anti-inflammatory effects of buffalo milk gangliosides are also disclosed.

AN 2003:509876 HCAPLUS <<LOGINID::20081029>>

DN 139:68312

TI Isolation and identification of buffalo milk gangliosides and their use for humanization of infant and other formulas

IN Colarow, Ladislas; Turini, Marco; Berger, Alvin

PA Societe des Produits Nestle S.A., Switz.

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1323424	A1	20030702	EP 2001-130614	20011227
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	WO 2003055497	A1	20030710	WO 2002-EP14876	20021220
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002361244	A1	20030715	AU 2002-361244	20021220
	AU 2002361244	B2	20080807		
	EP 1461048	A1	20040929	EP 2002-796763	20021220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	NZ 534132	A	20061222	NZ 2002-534132	20021220
	US 20050107311	A1	20050519	US 2004-498946	20040615
PRAI	EP 2001-130614	A	20011227		
	WO 2002-EP14876	W	20021220		

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Characterization and biological activity of gangliosides in buffalo milk

AB Gangliosides (GS) were evaluated in Swiss cow's milk (SCM), Italian buffalo milk (IBM) and its serum, Pakistan buffalo colostrum (PBC), Pakistan buffalo mature milk (PBM), and Pakistan buffalo milk from rice-growing areas (PBR). Dairy GS were obtained from the Folch's upper (hydrophilic) and lower (lipophilic) extraction phases, resp., and determined as lipid-bound sialic acid (LBSA) by colorimetry. Molar ratios of LBSA in the hydro- and lipophilic GS fractions were 52:48 to 79:21. Mature buffalo milk types had 40-100% more LBSA in the lipophilic GS fraction compared to SCM. Liquid PBC was higher in LBSA (24 nmol/g) compared to mature milk types

(8-11 nmol/g). Thin-layer chromatog. (TLC) and scanning densitometry showed distinct profiles of hydrophilic and lipophilic GS fractions. Lipophilic GS (but importantly not hydrophilic GS) from IBM and its serum decreased prostaglandin series 2 production by 75-80% in cultured human colonic epithelial cells exposed to tumor necrosis factor α (TNF α). Hydrophilic GD3 and lipophilic GM3 selectively bound rotavirus particles prepared from a rhesus strain and its mutant. A GS fraction in IBM showed a GM1-specific binding to cholera toxin subunit B (CTB). IBM serum (IBMS) was a rich source of LBSA (420 nmol/g proteins). In summary, improved methodol. led to increased LBSA recovery and isolation of addnl. and bioactive milk GS. Human and Italian buffalo milk had similar CTB binding, and both had increased polysialo-GS compared to cows milk. The toxin binding properties of buffalo milk GS, and the anti-inflammatory activity of the lipophilized GS fraction could be important for developing innovative food applications, as well as the subject of future research.

AN 2003:91672 HCAPLUS <<LOGINID::20081029>>

DN 139:50199

TI Characterization and biological activity of gangliosides in buffalo milk

AU Colarow, Ladislav; Turini, Marco; Teneberg, Susann; Berger, Alvin

CS Nestle Research Center, Lausanne, CH-1000 26, Switz.

SO Biochimica et Biophysica Acta, Molecular and Cell Biology of Lipids (2003), 1631(1), 94-106

CODEN: BBMLFG; ISSN: 1388-1981

PB Elsevier B.V.

DT Journal

LA English

RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT